AMERICAN AGRICULTURIST.

Designed to improve all Classes interested in Soil Culture

AGRICULTURE IS THE MOST HEALTHFUL, THE MOST USEFUL, AND THE MOST NOBLE EMPLOYMENT OF MAN—WASHINGTON

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September.

She never tattles, or plays the coquette,
Nor gossips with the idle village set,
Sleeps soundly when her daily task is done,
And wakes before her window greets the sun.
HOLTY.

The ideal of a country girl, which the poet here gives, lets us into a very important secret of farm life. For it must be confessed, that with all the charms with which it is actually invested, and with those superadded, which the imagination throws around it, country life is not attractive to the great mass of those who cultivate the earth. While there are those who enter into the spirit of their calling, and find it the most beautiful and enjoyable life, the large majority find it a painful endurance, are discontented, and watch for the first opportunity to escape from the toils and associations of the farm. You may demonstrate to them that the soil is the safest investment for their money, that its cultivation is the most healthful and honorable employment, that its pecuniary returns are the most safe and satisfactory, they are still discontented, and sigh for a change.

It has been well said that "the cultivation of the farm is the natural employment of man. It is upon the farm that virtue should thrive the best, that the body and the mind should be developed the most healthfully, that temptations should be the weakest, that social intercourse should be the simplest and sweetest, that beauty should thrill the soul with the finest raptures, and that life should be tranquilest in its flow, longest in its period, and happiest in its passage and its issues. This is the general and the first ideal of the farmer's life based upon the nature of the farmer's calling, and a universally recognized human want." Yet farm life presents no such beautiful aspect to multitudes who are engaged in it. It is repulsive, and all over our country the cream of the agricultural population rises annually, and disappears forever from the farm. The sifting process has been going on for the last half century, and all the new life and vigor infused into agricultural pursuits, by societies and clubs, by public discussions and by the monthly and weekly papers, have hardly arrested the emigration. There are many towns, in the older States that have gained nothing in wealth or population for the last forty years. They are simply prolific seed beds for the supply of other callings.

The poet gives us a clue to one of the causes of this depopulation of the farming districts. He presents us not with his own, but with the farmer's ideal of a prospective wife and mother. She must have no love for gossip, which means that she shall rarely visit her neighbors. She must not be coquettish, that is. she must ignore attractive dress, and all those womanly arts by which she shines in society. She must go to bed with the hens, sleep soundly, and be up with the lark, to attend to her daily tasks. Labor is glorified, as the chief end of man and woman upon the farm.

Any one intimately acquainted with the habits, and style of living among the cultivators of the soil knows, that there is more truth than poetry in this representation, and it is to this feature of farm life, in part, that so many are repelled from it. In many a rural district, the great man is not at all distinguished for his intellectual endowments, or for his moral qualities. He is simply a man of muscle, and his heroic achievements are feats of physical strength—huge trees felled by the ax in the shortest possible time, heavy stones lifted to their place in the wall, and acres of thick grass mowed in the quickest time upon record. The standard of excellence is brute muscle, and could a man be endowed with the strength of a horse he would become a demi-god, and receive the homage of the multitude, without any other change.

Now our humanity revolts at this glorification of muscle over mind and heart. A farmer is made for something better than to tax his muscles with perpetual toil, and his manhood is not to be measured by the number of pounds he can lift, or the skill with which he can wield an ax or a scythe. His wife is not to fill her place, and glorify her womanhood, *only* by her household industries. She has a higher value than to darn stockings, and make butter and cheese. All these industries in the house, and upon the farm, are but the instrument of the true life they should lead. Farm life with all the beauties and glories that encircle it is no better than chimney sweeping with its soot and sweat, if it do not rise above its work. Man rebels against toil and drudgery simply *for their own sake*. He will work hard and glory in it, for a noble end.

It is because so much is made of muscle, and so little of mind, that multitudes of the young of both sexes quit the farm in early life. They get some notion of life outside of the farm, not only from school books, and visits to the market town, but from the weekly journal of politics or religion that they read. Distance lends enchantment to the view, and as soon as they escape parental authority, they are off where labor has some higher reward than the feeding of the person, and the filling of the purse.

There is, too, upon the farm, a great neglect of all ornament. As a rule every thing is managed solely with reference to utility. No appeal is made to that sense of the beautiful which is a part of our being, and which God addresses everywhere in the works of his hand. No attention is paid to ornament, even where it can be had without cost. The house often has a barn look, and is only distinguished from the dormitory of the cattle, by a little more protection from the weather. Like the barn, it is often unpainted, though there is economy as well as beauty in the oil and lead. It is often without shutters or curtains to the windows, without carpets to the floors, or paper to the walls. There is no appeal made to the taste, from cellar to garret. It is the simplest provision possible, made for an eating and sleeping animal. The great room of the house is the kitchen, and here, too often, the cooking, the eating, and the whole social intercourse of the family takes place. There is no opportunity for the household to forget their toils, and abandon themselves to the enjoyments which their higher natures crave. A room to live in, to enjoy the society of wife and children, to receive friends and entertain them, to read, write and worship in, where one can feel that he is something more than an animal, and has other duties than physical toil, is a room yet to be added to many a farm house. There is as little taste shown upon the farm, as in the home. The fences are made to stop cattle; the wall is not faced, the rails are not laid in straight lines. The meadows are still peopled with stumps, and rocks, and the borders fringed with unsightly brush and brambles. Work that will secure results the present season is the one thing needful. There is never a time when the farmer can clean up his fences, and meadows, and make them look as if a man of taste was lord of the soil.

Young people of the present generation who read of the light of the nineteenth century, become disgusted very early with this barren matter of fact life. They crave society and long for the life of the village or the city, where man lives for something outside of his calling, and even business has a holiday aspect. If their tastes cannot be cultivated and gratified upon the farm, they will go where they can be. This topic is suggestive, and will be resumed on another occasion.

Empty vessels make the greatest sound; empty heads ditto.

Mental ornament will hide bodily defects.

Calendar of Operations for Sept. 1858.

[We note down sundry kinds of work to be done during the month, not so much to afford instruction to practical men, as to call to mind the various operations to be attended to. A glance over a table like this will often suggest some piece of work that might otherwise be forgotten or neglected. Our remarks are more especially adapted to the latitudes of 38° to 45°; but will be equally applicable to points further North and South by making due allowance for each degree of latitude, that is, earlier for the North, later for the South.

EXPLANATIONS.—*f* indicates the *first*; *m* the *middle*; and *l* the *last* of the month.—Doubling the letters thus: *ff*, or *mm*, or *ll*, gives particular emphasis to the period indicated.—Two letters placed together, as *fm* or *ml*, signifies that the work may be done in either or in both periods indicated; thus, work marked *fm*. indicates that it is to be attended to from the first to the middle of the month.]

Farm.

The early harvest over and late crops not yet matured, the interval should be spent in getting in the Winter grain, securing a large quantity of muck or other fertilizing materials, and making some permanent improvements upon the farm.

Agricultural Exhibitions—Read the remarks on a following page, and by your presence, wholesome counsel, improved stock and farm products strive to make them what they should be.

Barns and Hovels—Make early preparations to build enough of these to accommodate *all* the stock next Winter.

Buckwheat—Cut, f, mm, as soon as it will answer. If left too long, much grain will be lost in harvesting. Cradle and bind, rather than mow it, and thresh as soon as it is carted in, saving the straw for bedding.

Bushes—Continue to "grub" or "whip," ff, m. Clean out hedge rows and till the soil now worse than wasted.

Butter and Cheese making are supposed to be going on briskly in-doors. September and October are the best months for laying down butter for Winter use.

Cattle—Supply with the soiling crops, turnip and beet tops, cabbage trimmings, &c., as the pastures fail. A little sugar cane or corn stalks fed to milch cows will show good results in the quantity and quality of milk. Give full feed of grass and other green crops to fattening cattle, as flesh can be made much more rapidly now than during cold weather.

Cellars should be thoroughly cleansed, ventilated and whitewashed before receiving the Winter fruits and vegetables.

Corn—Select the earliest, most prolific, and best for seed, tracing up by a few husks and hanging in the loft or granaries. Cut and shock as soon as ripe, or upon the first severe frost. The grain will be heavier, and the fodder much better than when exposed uncut in the field to alternate storm and sun, frost and heat.

Cisterns—Construct during the month for household and barn use, unless already well provided with water.

Draining—Follow up briskly before heavy Autumn rains. Remember that low marshy lands are doubled in value by draining.

Eggs—Now that they are plenty put away a quantity for Winter use, either in salt or lime water.

Fences should be carefully watched now that the pasture feed is short and the corn field looks tempting.

Forests—Continue to cut away, ff, those intended to reclaim for tillage.

General Improvements—Clear meadows and other lands from stones putting them into permanent fences. Clear up the hedge rows and bushes encroaching on the tillage, drain that bog swamp, which has produced only frogs and flags, piling up sufficient manure from it to dress your corn fields next year.

Fowls—Keep their roosts dusted with plaster, and barrel the home-made guano for another season. Read directions for putting down eggs on another page.

Grain and Granaries—Continue the directions of last month.

Hemp and Flax will need harvesting, mm, l.

Hogs—Commence early to fatten, and keep yards and pens well supplied with manure materials. They may do much toward paying for their fattening by the manure they are capable of making at this season.

Manure—Apply the directions of last month, and collect a large quantity for another season, as well as to use on the wheat and rye now being sown.

Muck—Dig and cart or pile up, ff, m, until the rains drive you from your "claim." Store a large quantity under cover to use in the stables next Winter. *It* WILL PAY.

Pastures are now getting short. Feed all the garden refuse and green crops to make good the failing grass.

Plow grounds for Wheat and Rye, ff, turning the soil a little deeper than formerly. Subsoil for these crops if possible.

Potatoes—Dig as wanted for use or market; but the Winter crop is generally better in the ground until cool weather, unless the field is wanted for Winter grain.

Root crops are growing rapidly this month. Keep the ground well stirred with the cultivator and horse or hand hoe, and suffer no weeds to grow in the rows.

Rye—Sow, ff, m, if not done last month.

Sheep—Guard against prowling dogs, keep supplied with salt and rub tar upon their noses to keep away the *Cephalemyia ovis* or bot-fly which breeds worms by depositing eggs in their nostrils.

Soiling Crops—Cut and feed as wanted, ff, m. Any remaining should be harvested and cured while the weather is still favorable for doing so.

Stone Fences or Walls—Build these during the leisure of this month, to use up the stones and make a substantial fence at the same time.

Sugar Cane—Continue to cut and feed, ff, m. The main or sugar crop should be harvested as soon as the foliage is killed by frost.

Timber—Complete cutting this month in preference to leaving it till Winter.

Timothy—Sow, ff, m, with Wheat, or by itself for a future grass crop.

Turnips—Thin late sowings, feed early ones and keep all well hoed. Sow more of the quick growing varieties on vacant ground, ff.

Weeds—Throw to the hogs or add to composts before they ripen seeds. Keep yards and manure heaps free from them.

Wheat should now be put in as early as may be, on deeply plowed and finely pulverized soil that has received a good coating of manure. Many complaints of winter-kill are owing to late sowing. The growth is not sufficient before Winter sets in to protect the roots. Where it can be done, use the drill in sowing.

Orchard and Nursery.

Gathering early fruits, pruning, washing and digging about the trees will constitute the principal labors in the orchard during this month. The Nurseryman is still engaged in

Budding late growing varieties, especially peaches. Insert the buds low according to directions given on page 161 of volume XVI. Use every precaution to obtain shoots from *genuine* varieties, and mark the rows with the name or number of the kind used.

Examine all buds inserted three or four weeks ago and if they have failed, insert others of the same kind. Look to bandages, and unless strips of old cloth were used which rupture by the growth of the tree, loosen the binding or slit it with a knife, if the union is firm.

Evergreens *may* be moved, m, ll, but Spring is a better time. If pruning or shearing is requisite the present is the most suitable time. By no means trim an evergreen to a naked stem as you would a deciduous tree. The knife should only be used to remove dead branches, and to clip the ends occasionally to form a pyramidal or cone shaped head.

Fruits—Gather early varieties with care, picking by hand. Do not wait for Bartlett and other pears to soften upon the tree, but pick just before they ripen and allow them to mature in the market or on the fruit shelves. Late fruits should remain on the trees till next month as their keeping qualities would be injured by early picking.

Grounds for Fall and Spring Planting—Prepare during the leisure of this month. The soil which is to produce a crop of trees should be heavily manured previous to planting.

Hoe Nursery rows still, to prevent late weeds from seeding the ground. A cultivator, plow or horse-hoe run between the rows frequently, will do most of the work.

Insects—September is the very best time to dislodge the borer. Examine each tree, especially those of few years' orchard growth, and with a whale bone probe, finish his career. Read article on page 243 August number.

Labels—Procure a good supply for marking young trees set or sent out in the Fall, when you will be too busy to prepare them.

Layering—Continue, f, m, as directed last month. Select wood of the present season's growth.

Manures—Prepare a good supply of stable manure, muck, ashes and lime for both orchard and nursery.

Pits or Seeds of Stone Fruits—Collect and plant at once, or put in boxes of earth and expose to the weather till late Fall or early Spring.

Planting—Prepare for, ll, and early bespeak good trees from the nurseryman himself rather than from an agent or tree peddler.

Pruning may very properly be continued during this month. It is much better to do it now, in this and northern latitudes than defer it until Spring, that worst season for pruning.

Records of both orchard and nurseries should be kept in a book for the purpose. In cutting scions and buds for propagating, and in taking up trees for setting out, too much care as to variety can not be used. In addition to labels or stakes, have a book record of the kinds.

Seed Beds—Do not allow them to become overrun with weeds in the latter part of the season.

Seeds of Nursery Stock—Gather as they ripen, and, as nearly all of them require planting in Autumn, it is better to put them in at once, or place in boxes of earth and leave in the open air.

Weeds—Systematically keep them from growing in the nursery or about orchard trees.

Kitchen and Fruit Garden.

The season thus far, and especially during August has been very favorable for garden crops, and the cultivator is still gathering the fruits of his toil with a plentiful supply of vegetables now ready for market.

Blackberries—Cut out old canes which have perfected their crop of fruit.

Cabbage and Cauliflowers—Sow, ff, m, for early Spring use to be pricked out in a cold frame during the Winter. Use the plow or horse hoe among late field cabbages, and keep free from weeds.

Celery—Earth up in dry weather, ff, m, and l, as needed taking care not to bruise the stalks.

Cold Frames—Get these in readiness, with the sashes in order, and arrange them for use, ll.

Corn—Late plantings are now yielding a full supply. Dry a quantity for Winter use.

Corn Salad—Sow, ff, m.

Cucumbers—Gather pickles, f, m, before they are injured by the frost.

Grapes are ripening and may be made into wine, m, ll. Gather with care and put some away for Winter.

Hoe growing crops often, especially late turnips and cabbages.

Hops—Gather, ff, m, and house the poles for another year.

Kale—Sow, f, m.

Lettuce—Sow, ff, lor late Fall use, and, mm, for cold frames. As it bears but little frost, transplant to the frames, ll, if the weather is cold.

Manures—Begin to collect a goodly supply for next Spring. Muck can scarcely be too highly estimated for garden use when composted with other manures.

Mushrooms—Collect spawn, and other materials, ff, m, and make beds, m, ll.

Nasturtiums—Gather and pickle, ff, m.

Onions—Sow, ff, m, for Spring sets, and early use.

Parsley—Sow, ff, m, for Spring use.

Potatoes may be dug, ll, and stored for Winter.

Radishes—Sow, ff, m, for Fall, and ll, for Winter use.

Raspberries—Cut out old canes that have done bearing, and house stakes for another season.

Rhubarb—Seed may be sown, ff, m, or left until Spring. Now is a good time to put up a quantity in glass jars or air tight cans for winter use as described elsewhere. Select the latest growth of the Linnæus variety.

Seeds—Collect as fast as they ripen, and keep unmixed and well marked.

Spinach sow, ff, and thin out, m, ll, for standing over Winter.

Strawberries—Plant, ff. m, if the bed was not set out last month. Water them unless the ground is sufficiently moist.

Tomatoes—While abundant, put away a large quantity in cans or bottles for Winter use.

Turnips—Keep late crops well hoed, running a small plow or horse hoe between the rows often.

Water newly planted seeds if the ground is dry and early vegetation is desired. Otherwise they may remain for weeks without coming up.

Weeds—Keep down and prevent their sowing seed for a future crop.

Winter Cherries are now daily ripening and falling upon the ground. Collect often for use, and put away a quantity of the latest growth with the hull on, in boxes for winter use, covering with cotton to exclude air.

Winter Cress—Sow, ff, m.

Flower Garden and Lawn.

These grounds should still present a fine show of late Summer and Autumn blooming plants which need frequent hoeings, occasional waterings, and a careful removal of weeds. Many of the plants which were brought from the Parlor, Green and Forcing houses, and either transplanted into the border, or plunged into the earth without removing from the pots will need returning as the cool nights of Autumn approach. Attend also to some of the early flowering

Annuals, the beds for which may be prepared on a warm border. After thorough manuring and deep working—trenching if possible—sow Centurias, Clarkia, Collinsia, Coreopsis, Mignonette, Phlox, Scabious, Sweet Alyssum, &c., which will, with a little protection, stand the Winter and come into early bloom in the Spring; or some of them may be set in pots and placed in the house for Winter flowering.

Biennials and Perennials—Fibrous rooted plants may be divided and reset, ll, the better to establish themselves for early blooming another season.

Bulbous Plants—Prepare grounds and put in, ff, m, l,

he tulips, hyacinths, crown imperials, crocuses, &c., which are still out of the ground. We much prefer planting them early. Now is the proper time to sow seed for new varieties.

Carnations—Remove layers, f, m, and pot or insert in the border. Transplant seedlings to blooming beds, watering at the same time.

Chrysanthemums—Stake up, removing weak shoots, and prune side branches off from those trained to a single stem.

Cuttings of woody shrubs may be made, ll.

Dahlias are still in fine flower. Keep them fastened to stakes and prune off straggling side branches. Mark the varieties of flower before they are destroyed by frost. A simple method is to tie a *white* strip of cloth to a *white* flower stalk, a *red* strip to a red or scarlet flower, &c. Doubling the strips conveys the idea of a *double* flower. This is not sufficiently definite for the amateur who should preserve the original names and specify the habits and colors upon labels attached to the plants by wires.

Delphinium—Sow, m, ll.

Evergreens—Plant, ff, m, if they *must* be put out before Spring. Prune or shear those requiring it.

Flower Stalks—Cut away and remove from the grounds as fast as they are done blooming.

Flower Pits—Construct, m, ll, for safely keeping tender varieties over Winter, where there are no properly constructed *houses*. A good plan of a cheap one was given on page 79 Vol. XVI.

Geraniums—Take off slips, ff, m, and pot for Winter bloom.

Gravel Walks—Keep free from grass and weeds.

Hedges—Give the last shearing for the season, ff, preserving a neat form widest at the bottom.

Lawn—Keep neat and clean, mowing and raking occasionally. Scatter seed over any thin spots.

Lillies—Transplant or plant out, m, ll.

Pansies—Sow seed and part layers, f, m.

Pœonies—Divide and reset, ll

Pinks—Separate layers and pot or plant for next season.

Primulas—Sow, ff, m.

Roses—Bud, ff, any omitted last month. Layer the present season's growth at the same time.

Seeds—Collect varieties before they are wasted upon the ground.

Tender Plants—Remove to the Green and Hot houses, mm, those varieties which would be injured by the frost. Dress and cleanse them before carrying in.

Verbenas—Pot runners, f, m, to preserve a stock for Winter and early Spring bloom. Layers may still be made by simply covering a part of the base of the straggling branches which readily take root.

Wall Flowers and Stocks—Lift from borders and pot, m, l.

Water thoroughly plants now reset or potted.

Weeds—Do not neglect them as the flowers begin to fade and the grounds lose somewhat of their attractiveness.

Green and Hot Houses.

These should be looked to now, and, unless already done, they should have a thorough over-hauling and cleansing at once. Look to the furnaces, flues, cisterns and water-pipes; see that the glazing is complete, and eords, pullies, &c., in working order. If the houses have been entirely empty, give a thorough syringing with the force pump or garden engine, throwing the water with force into every corner, crack and crevice, to dislodge insects harboring there. Arrange the shelves, renew the bark or saw dust bed if necessary, prepare boxes and pots to receive the plants, collect mold, peat and sand for potting, and having completed the other arrangements, paint where required, leaving the windows open for a few days previous to bringing in the plants. If tender plants are exposed to the odor of new paint, it often causes defoliation. Everything being complete, commence bringing in and arranging the plants, f, m, according as the weather is warm, or cool, beginning with the most tender varieties. Place the taller plants on the back shelves, and low kinds in front, bearing in mind at the same time that some varieties require more light than others. Arrange them near or at a distance from the furnace as they need a strong or light heat. A dry shelf should contain those plants which require very little water, including most of the bulbous kinds. Having brought them all in before the cool nights have checked their growth, it will be necessary to admit abundance of

Air both by the upper and lower ventilators, closing at night.

Annuals—Sow a few, f, m, l, for a succession of bloom.

Bark and saw dust beds should be renewed, ff, m.

Bulbs—Plant, f, m, l, for a succession of Winter bloom, keeping them in the green house for the present.

Camellias—Finish repotting, ff, m, and take to houses, m, l. Grafting or inarching may still be performed, ff, m.

Ericas and Epacris—Repot, f, m.

Fires—Start, m, ll, to expel dampness from forcing houses.

Geraniums—Take from borders, f, m, and pot for Winter bloom.

Labels—Have in readiness to mark all the plants as they are taken in.

Pines—Shift, ff, those intended for fruiting next season, if not already done.

Potting generally should qe completed early, and every thing arranged for filling the shelves.

Prune and Dress Potted Plants previous to carrying to the houses.

Verbenas and Petunias—Make cuttings, and layer to keep up a stock for propagation and for Winter bloom.

Water—Give to plants when repotted, and apply freely inside the house. Dampen the floors and syringe overhead to maintain a humid atmosphere.

Apiary for September.

BY M. QUINBY.

St. Johnsville, N. Y.

It should be understood by all bee-keepers, that if there are no *weak* colonies in an apiary, there is but little danger of bees being robbed. If strong colonies are ever plundered, it is by injudicious feeding, or after a beginning has been made by the robbers with weak ones, or some other encouragement given. The yield of honey fails almost entirely nearly everywhere, with the flowers of Buckwheat in the early part of this month. All temptations should be at once out of the way—examine every colony, young or old, and any one too weak to keep robbers away, should be removed, as such ones can not be wintered. When honey first fails is the time of danger. Attention then costs no more than at another time, and may be worth many times that bestowed at some convenient season. When two or three weak stocks stand near each other, they may be united for mutual defense. To prevent their quarreling, sprinkle them thoroughly with water made very sweet with sugar, and flavored with a few drops of peppermint or other essence. Bees adhere to their old stand, and when many feet apart, can not be united successfully. Two neighbors living a mile or two apart, could exchange bees sometimes, advantageously.

A queenless stock that has stores to winter a full swarm, should have bees and a queen introduced; it will generally make a good stock hive, while it is worth little to take up, on account of bee-bread mixed with the honey. A *new swarm*, that has made combs without a queen, although it has stores for Winter, should be broken up. It has too many drone-cells for a profitable stock. Every stock with foul brood, should be condemned at once; it is usually the best way to kill the bees, and secure the honey. Be careful that healthy colonies do not get *any* of the honey as the disease is quite sure to be carried with it. To render such honey safe and healthy, to feed to bees, add plenty of water to prevent burning, then scald and skim it thoroughly. Man may eat it without scalding or any bad effect, if taken from parts of the hive where there is no brood. To select the best combs for the table, take those near the top and outside of the hive; the drone-cells seldom contain bee-bread.

The Chinese Cane for Sweetening.

The present and prospective high prices of all grades of sugar will render it an object for those who have the Chinese Sugar Cane growing in quantity, to turn it to account in the manufacture of syrup. The still imperfect development of processes for manufacturing *sugar* from the juice, will prevent much being done in that line, the present season at least. We still hope that even during this year the experiments to be made will go far to establish some convenient and profitable mode of obtaining the dry sugar itself. But whether this be the case or not, we have proved by our own experiments, last year, if we had not had hundreds of confirmatory evidences, that the juice may be converted into a cheap palatable syrup. As stated in a former number, we obtained about 100 gallons of syrup from half an acre, though the imperfection in the manufacture rendered the larger portion of it of poor quality. The same processes which made even a small portion of it an excellent syrup, would have rendered the whole so, if they had been known and adopted in season.

The articles we published last Fall and Winter perhaps indicated clearly enough what are the main requisites for producing good syrup, but we will add a hint or two now.

1. Some kind of mill or rollers will be needed for pressing out the juice thoroughly. Whether the mill be large or small, of wood or iron, will depend upon the amount of material to be pressed, and the convenience of obtaining such a mill as may be desired. We think iron rollers are by far the best, unless for the smallest experiments, when home-made wooden rollers may be used.

2. The cane should be cut as soon as convenient after the seed pulp enters the ripening or hard doughy state. It should be cut no faster than pressed or boiled. The cutting may be continued until after sufficient freezing and thawing takes place to slightly sour the juice.

3. The boiling should be commenced as soon as the juice is expressed.

4. The boiling down should be done in shallow vessels, with the fire touching only the bottom, for in no case, and at no stage of the boiling, should the fire on the outside of the vessel be allowed to come up as high as the surface of the liquid within.

5. The boiling should be *as brisk as possible*, until the syrup is so thick as to be in danger of burning, when the heat should be reduced. Three or four hours at most is all the time that should ordinarily be taken to reduce the juice to a moderately thick syrup.

6. In a majority of cases reported, the best results have been obtained by adding nothing to the juice, but boiling rapidly in vessels of a few inches in depth, and simply removing the rising scum entirely from the surface. (The "skimmings" may be turned to good account for vinegar, by simply putting them in barrels with some water, and leaving them to sour.)

The exceptions to this last rule are, that when the canes are long ripened, or subject to freezing and thawing, or when the boiling is long continued, it is well to add a little soda or lime, to neutralize any acid formed. The same will be the case when the juice has stood long after expressing it, before brisk boiling has been secured.

OUR BASKET

Into which are thrown all sorts of paragraphs—such as NOTES *and* REPLIES *to* CORRESPONDENTS, *with Useful or Interesting Extracts from their Letters, together with Gleanings of various kinds from various sources.*

Note to Contributors.—We have a hundred or more Notes, Replies, etc., designed for the "Basket," but the present month this department has been unceremoniously crowded out of its usual place, on pages 282-3, by the Telegraph article, and a large amount of extra advertisements—neither of which were contemplated when the 16 pages preceding 281 were made up and stereotyped.

Borage.—R. A. Davis, Somerset Co., Me. This plant, like many others collected and sent out from the "Government Seed Store," is of very little practical value. R. Buist, in his "Kitchen Gardener," speaks to the point when he says; "Borage is cultivated in our gardens on account of the supposed cordial virtues of its flowers, but they have long lost their reputation." We regard it as little better than a pest in the garden where it sows an immense quantity of seeds which spring up like other weeds to be eradicated with difficulty. We were foolish enough to try it.

Bees, a Weak Stock.—J. G. S., Suffolk Co., L. I., has two old swarms of bees, one strong and the other weak. He inquires whether he can put the weak one with the stronger, or transfer it to a strong new swarm in a larger hive.—*Ans.*: It is probable that the weak stock has lost its queen, and there are not as many bees left, as there appears to be. It is doubtful if it would *pay* to transfer them, even if successful. It is nearly always fatal to put a weak colony with a strong one, except on the day they swarm. The only way at other times, is to scent them strongly with smoke, or sugar water flavored with some essence. The advantage that a few bees would be to a strong colony, would hardly balance the evil of the disturbance. If the weak stock is free from worms, and has stores enough to winter a swarm, and it is desirable to save it, probably some neighbor would have a colony destined for the brimstone pit, that he would give or sell, to be introduced into it, which might make it a valuable stock. M. Q.

Squashes and Pumpkins, Keeping.—A. A. Gage, Rockingham Co., N. H. Gather them carefully, before heavy frosts in the Fall, and lay them away under cover, where they will not freeze. Upon the approach of very cold weather, carry them without bruising or breaking the stems, to some dry part of the house, where frost does not reach. Cellars are usually too damp for them. Houses are sometimes constructed solely for keeping large quantities of them for market, and warmed by means of a stove during the Winter.

Morrisania (N. Y.) Hort. Society.—This young and vigorous association have decided to hold a Fall Exhibition, Oct. 6 and 7. Committee of arrangements: Messrs. Samuel Munn, Wm. H. Wilcox, Geo. H. Pollock, Thos. E. Sutton, H. P. Sandford, Geo. W. Alexander and Gilbert Dayton. The following are the officers elected for the ensuing year: *President.*—Samuel Munn; *Vice Presidents.*—Wm. H. Fox, Robert H. Elton, L. K. Osborn, C. Moger, Thos. W. Ball, Harvey M. Morris, T. E. Sutton, Frances I. Smith, Benj. M. Whitlock, Adrian Janes, F. W. Gilley, Lewis G. Morris, David Milliken, G. W. Alexander, Jas. Garner, Andw. Richardson, Jordan L. Mott, Jr., F. Grote: *Secretary.*—Wm. H. Willcox

Benefits of Hoeing.

Keeping down weeds is not the only end of hoeing. Exterminating them, so that they may not interfere with useful plants, or go to seed, is highly important, but this is not the whole of the chapter. We refer now, to the great benefit arising from a thorough pulverization of the soil. Hard, unbroken ground, though free from weeds, is not in a condition to receive sensible benefit from the atmosphere. The dews of night can not penetrate it, and when Summer rains fall, they only dash against the surface and run off, as from a rock.

The benefit of hoeing was impressed upon us, the present Summer, during a dry time which threatened to become a drouth. Noticing certain Boston Marrow Squash vines beginning to wilt, we broke up the hard, dry soil at the extremity of the roots, and pulverized it well. The very first night, it imbibed the dews, as it had not done before for a long time. And in a few days, when a copious shower fell, the water, instead of running off from the hills, soaked into the soil and revived the plants into a healthy growth. The same thing was observed in the case of a recently planted tree, which had begun to flag, in the long-continued dry weather. Hoeing the ground for several feet around the tree prepared it to catch and retain the dews and rains. The tree fairly smiled under the treatment. Mulching was added to the hoeing and the raining, and we now hope to save a fine specimen of *Magnolia acuminata*.

Fall Colts.

To the Editor of the American Agriculturist:

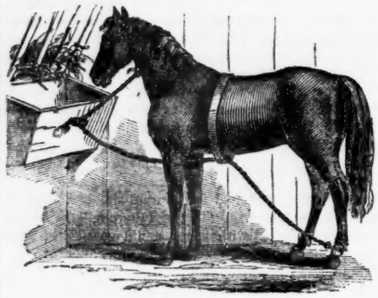
It is the custom of most farmers and stock breeders to have all their young animals come in the Spring of the year. There is abundant reason for this, as it is more natural to the dam, in the first place, and then there is the young grass furnishing a generous flow of milk, the healthy condition of the animals in that genial season, and the less trouble to the breeder in caring for them. In this view I decidedly agree with the great mass of farmers in Spring breeding.

But with colts, particularly when it is necessary to work the mares that produce them on the farm, Spring colts are oftentimes inconvenient and troublesome, so much so that it is better to dispense with their breeding altogether than to be bothered with young colts at just that busy, hurrying season of the year, when plowing, harrowing, and getting in the Spring crops is of the highest consequence. And it is most generally this class of farmers who have the least Fall work to do with their horses. In September the heavy team work is about finished, the wheat is got in, and the crops mainly harvested. The mares can then be spared to drop a foal, and with good keep, it can be well nursed on the fresh October grass, and get well along by the time the cold weather fairly sets in. In March the colt is ready to wean, and by the first day of April the dam is in condition, although again in foal, to do a good season's work, if carefully driven, and properly fed—overworked she never should be, whether in foal or not.

Some of the best horses we have known were Fall colts, and in many sections of the country, stallions are kept purposely for a Fall season, to accommodate such farmers as practice that system. And now, that by the opening of our wide, stoneless, prairie regions to grain growing so extensively, oxen are mostly discarded for farm labor, it is more necessary for farmers to breed their own colts than formerly. The practice of breeding Fall colts may be commended as one of sound economy and convenience.

WESTERN FARMER.

REMARK.—We doubt the propriety of the above course. If the colt be dropped in September, the dam will be in the *heaviest* period of gestation not only during the hottest weather, but also while subjected to the severest work. We should say, let the colts be dropped as early as possible in the Spring, and if the mare must be worked so hard as to heat and injure the milk, let the colt be weaned and brought up by hand. We would, however, suggest, that better results may be obtained in the long run, by allowing working mares to breed only twice in three years, alternately in March and September. This will leave them free for hard service one entire Summer out of three, and give a season for recruiting between each period of gestation. The subject is open for discussion by practical breeders.—ED.



To Break an old Horse from pulling at the Halter.

We have drawn the above sketch to illustrate a method of preventing an old horse from pulling at the halter, as described to us by Mr. David Lyman, of Middlefield, Ct. Since looking at the engraving it has occurred to us that there is perhaps danger that the horse, if a vicious one and accustomed to pulling, may throw himself and receive severe injury and sprains. Mr. L. describes the operation as follows:

Put a strong strap or rope around the neck, and another strap with a ring in it around the pastern of one of the *hind* feet, and attach a strong rope to the ring, and pass it under a firm strap or cir-single buckled loosely around the girth, just back of the shoulder. Continue the rope between the fore legs and through a hole or ring in the manger, or post, where the horse will pull, and then tie it to the strap around the neck—then let him pull "to his heart's content." A few such trials will most likely subdue him. The harder he pulls back the harder his hind foot is pulled forward, and the experimenter will be surprised to see how little the horse can do—he will not be likely to even get his hind foot off the ground.

I have in this manner cured a mare, 10 years old, which was the most vicious beast in this respect I have ever seen. For some two weeks I tied her in this way always, except in the stable at night, when I secured her by tying around her neck a rope which she could not break.

PRETTY SENTIMENT.—We have planted some little trees, and expect that ere long the beautiful birds will build their nests in the spreading branches; and it may be that they will finally cast mottled shadows over our grave.

All truth must not be told at all times.

Ashes and Muck.

One of the best methods of using muck, particularly in the vicinity of villages where wood is the principal fuel, is to compost it with ashes. In these villages, ashes are always to be had, and the enterprising farmer, who takes the paper, will buy them up early in the winter, before his old fogy brethren think of moving. They cannot blame him, if they find the market bare, when they want ashes for dressing their potatoes and corn next June.

Ashes contain, in large quantities, potash and lime, both powerful alkalies, and efficient decomposers of organic substances. The vegetable matter, of which peat and muck are principally composed, undergoes a rapid decomposition, when mixed with either potash or lime. It is thus reduced to that impalpable state, in which it can be taken up by the roots of growing plants. The mode of composting the muck and ashes, is not a matter of very great importance. There should not be less than five bushels of ashes to a cord of muck or peat. Farmers, who have used this compost in about these proportions, affirm that the results, in a course of years, are as satisfactory as a like quantity of barn yard manure. As the ashes cost only about ten to twelve cents a bushel, it will be seen that this is a very cheap manure. The application of fifteen or twenty cords to the acre produces large crops of corn, potatoes, and other hoed crops, and the effect is visible upon the grass crop for many years afterwards.

Where the compost is prepared at this season of the year, it should be forked over once or twice, before it is applied in the Spring. One advantage of this preparation is, that it may be drawn directly to the fields where it is to be used. The decomposition will go on quite as well in the open field as under cover, and nothing valuable will be lost.

While farmers are carting wood and lumber to the cities and villages, as they often are during the winter, they may as well carry back ashes to their farms as not. The expense of transportation will not be felt, and the land will receive some compensation for the wood it has lost. This compost is particularly valuable for fruit trees. A half cord dug in under an old apple tree will give it a new lease of life.

Errors in the Use of Muck.

Where farmers have experimented with muck, and failed to benefit their land by its use, it is probably owing to an unseasonable application. There are few muck or peat swamps, that will afford a good dressing for land without some preparation. They frequently contain salts of iron, and other deleterious compounds, that will destroy vegetation. Some in their first attempts to use muck are ignorant of this fact, and seeing the grass turn yellow and die under the top dressing, they conclude that muck is a humbug. One has often occasion to notice the difference in muck from the same swamp. On the banks of the same ditch, where the muck is allowed to lie for one season, you will see some spots entirely barren, while others show a stunted vegetation, and others still, great luxuriance. It is never safe to apply *fresh* muck or peat to growing crops. It is too cold and sour, and often charged with poisonous matters.

It may be properly seasoned in various ways, according to the circumstances of the cultivator. The cheapest way of preparing it for use, where

it is not immediately wanted, is to expose it to the elements for a year. In this case, it is a good plan to fork it over at least twice in the course of the year, and break the lumps as fine as possible. The rain and frost will thus have better access to every particle in the mass. The freezings and thawings of Winter will be more numerous, and the whole will be more perfectly comminuted, and charged with the ammonia which the snow and rain furnish in small quantities.

A better way still, is to draw the muck to the field where you wish to use it the next season, and there thoroughly mix it with quick lime, at the rate of a barrel to every two cords of muck. Fork the heaps over at the beginning and close of the freezing weather, and the compost will be fit for a top dressing, or for plowing in at the usual time of planting. Either common stone lime, or that made from oyster shells may be used.

A still better article for curing muck, is wood ashes. These contain not only lime, but large quantities of potash, which is very active in destroying the vegetable fiber of the muck, and in correcting its acids. It will be well to use a barrel of fresh or unleached ashes to the cord of muck, and fork over, as in the case of the lime. By using a still larger quantity of ashes, say ten bushels to the cord, the compost may be prepared in three months.

But the most thorough preparation the muck can have is to mix it with stable manure, or with animal matter. This may be done by putting it in the stables and yards, or by drawing both muck and manure to the fields where they will be wanted next Spring and mixing them there, in alternate layers of two parts muck to one of manure. They should be forked over at least twice, in the course of the Winter. If fish, night soil, or butcher's offal is used, four or five parts of the muck may be taken to one of the manure. A cord of muck to 1000 white or bony fish, is a good proportion. If a farmer prepares muck in any of these ways he will not be disappointed in the results.

How the Chinese Make Manures.

In connection with our remarks, last month, about poudrette, we wish to state how the Chinese manage the manure-heap. It has often been the wonder of farmers in this part of the world, how the Chinese, with but few domestic animals, have been able to keep their lands in a high state of fertility, and to sustain such an immense population. We do not now wonder so much, when we know what pains they take in the saving and manufacture of manures.

Having very few horses or cattle, and therefore little barn yard manure, they save all the human excrements. And not only the solid parts, but the liquid, which, being diluted with water, they apply to the roots of all growing plants. The country people visit the cities and large towns regularly, and carry off the contents of privies and urinals at a stipulated price, which they make into poudrette, somewhat in the manner we have formerly specified. The publicity of "necessaries," and the unblushing display of chamber vessels everywhere, at first shock Occidental sensibilities; but custom and the usefulness of the fertilizing materials thus saved, soon reconcile one to the singular usage.

Oil-cake is another of their manures, made from a bean. This bean is crushed, then steamed, and an oil pressed from it, and the cake which remains becomes an excellent fertilizer. It is often used in a liquid form, having been broken up, and steeped and then reduced by the addition of considerable water.

The Chinese use the sediment collected from the bottom of their canals, for manure. They dig large pits, into which they throw successive layers of canal mud, weeds, straw, garbage and all corruptable matters. When a pit has become full, it is cleaned out, and filled again in the same way, so that, in the course of a year a large quantity of compost is secured. Nor is this all. Ashes of all kinds are preserved, and used with the greatest economy. The hair from the barbers' shops is saved, and sold at so much a pound. Boys go about the streets, with rake and basket, gathering up everything which can be converted into manure, certain of finding ready sale for it.

Manuring in the Hill.

A Sausage Story.—An old friend of ours—one sick and tired of the care and bustle of a city life, has retired into the country, and "gone to farming," as the saying is. His land, albeit well situated and commanding sundry fine prospects, is not so particularly fertile as some we have seen—requiring scientific culture and a liberal system of manuring to induce an abundant yield. So far by way of explanation.

Once upon a time our friend being upon a short visit to New Orleans, was attending an auction sale down town, and as it so happened, they were selling damaged sausages at the time. There were some eight or ten barrels of them, and they were "just going at 50 cents a barrel," when the auctioneer, with all apparent seriousness, remarked that they were worth more than that to manure land with. Here was an idea. "Sixty-two and a half cents—third and last call—gone!" retorted the auctioneer. "Cash takes them at sixty-two and a half cents per barrel!"

To have them shipped to his country seat was the immediate work of our friend, and as it was then planting time, and the sausages, to use a common phrase, "were getting no better very fast," to have them safe underground and out of the way was his next movement. He was about to plant a field of several acres of corn—the soil of the piny woods species—so here was just the spot for this new experiment in agriculture, this new wrinkle in the science of geoponics. One "link" of sausage being deemed amply sufficient, that amount was placed in each hill, accompanied by the usual number of kernels of corn and an occasional pumpkin seed, and all were nicely covered over in the usual style. Now, after premising that several days have occurred since the corn was planted, the sequel of the story shall be told in a dialogue between our friend and one of his neighbors.

Neighbor—Well, friend, have you planted your corn?

Friend—Yes, several days since.

N. Is it up yet?

F. Up! yes: and gone; the most of it

N. How is that?

F. Well, you see, I bought a lot of damaged sausages the other day in New Orleans, a smooth tongue of an auctioneer saying they would make excellent manure if nothing else. I brought the lot over, commenced planting my corn at once, as it was time, planted a sausage in each hill, and—

N. Well, and what?

F. And felt satisfied that I had made a good job of it. Some days afterwards I went out to see how the corn was coming on, and a pretty piece of business I have made of trying agricultural experiments.

N. Why, what was the matter?

F. Matter! The first thing I saw before reaching the field was the greatest lot of dogs digging and stratching all over it! There were my dogs, and your dogs, and all the neighbors' dogs, besides about three hundred strange dogs I never set my eyes on before, and every one was hard at it mining after the buried sausages. Somehow or other, the rascally whelps had scented out the business, and they have dug up every hill by this time. If I could set every dog of them on that auctioneer, I'd be satisfied. [Writer unknown.]

A Substitute for Barn Yard Manure.

We say, a substitute, though we are not certain that it is a full equivalent. It will, however, answer nearly as well, and should be used by farmers to make up the lack of ordinary manure. It is this; a compost of muck and lime, or of muck and ashes. Dissolve a bushel of salt in water enough to slake five or six bushels of fresh lime to a fine, dry powder. It is not well to slake the lime faster than it is wanted for use, because it is much more efficacious if applied while hot, and covered at once with a layer of muck. The best rule for preparing the compost heap is, a bushel of lime to one load of muck, intimately mixed; though three bushels to five loads makes a very good manure. In laying up the heap, let the layers of muck and lime be thin, so that the sourness of the muck may be neutralized, and decomposition be more rapid and complete. After the heap is finished, and has lain a month or six weeks, it should be overhauled, and shoveled into a promiscuous mass, ready for use.

Where lime is expensive, or difficult to command, unleached ashes may be used, at the rate of three or four bushels to a cord of muck. After lying a month or two, it should be turned over and mixed again, as recommended in the other case. Lime or ashes mixed with sods and weeds and other refuse will make a good bank for the farmer to draw upon, when the institution under the port-hole of the barn has ceased to make anything like satisfactory dividends.

Water Proof Cement.

Is one of the adjuncts of good husbandry, and is every year working its way into notice upon the farm. It is known in various parts of the country, under the names of *water lime, hydraulic lime,* and *Roman cement.* It has the property of drying rapidly; and hardens under water. It was formerly imported, and was consequently very little used on account of the expense; but since it was discovered that we have the rock from which it is made, in inexhaustible quantities, its manufacture has been commenced in this country, and it is now furnished almost as cheap as the common lime.

Its most important uses to the farmer is in the preparation of manure and house cellars. Every farmer wants a cellar under his barn, and needs to have the bottom made water tight. Without this provision much of the liquid manure will soak into the earth. It is nearly impossible to furnish absorbents in sufficiently large quantity to prevent all loss. The cementing of the bottoms and sides of the manure cellar is so simple, that any farmer can do it himself, if the mason is not convenient. If the bottom is a hard gravel, he may put the cement directly upon it. If it is not, it should be filled in with small stones to the depth of several inches, and the cement be laid upon

these. A layer of bricks may be substituted for stones.

The plaster is prepared, by mixing one part of the cement, with two parts of dry sharp sand, the more gritty and coarse the better. The mixing should be done in the dry state, and then sufficient water added, to make it of the right thickness to be spread easily with the trowel. As it sets very quickly, but a small quantity can be mixed at a time. It should be applied immediately, and smoothed off. The thickness of the coat, will depend somewhat upon the situation of the cellar, and the uses you desire to make of it. If a cart is to be driven upon it, it should be at least five or six inches thick. If the cellar is surrounded with springs, and it is desirable to keep out water, it should also be made thick, and the plaster should be laid on in three successive layers, each layer having time to dry, before it is followed by another. The sides should also be cemented two or three feet high—or to the top if water is likely to ooze in. With such a cellar all the liquid manure can be saved, and in case the superincumbent mass of muck and stable manure ferments and dries, water can be added, or the liquid at the bottom can be pumped up on top.

The root cellar should also be cemented and made both rat and frost proof. The destruction of roots, occasioned by rats is very great, and cement is the best safeguard we have ever tried. Cement stops every crevice, and virtually makes a large stone jar, inaccessible to all vermin. It makes a smooth bottom, that may easily be kept clean.

The house cellar should also be treated in the same way. The comfort of the housekeeper will be very much increased, to know that every thing left in the cellar is perfectly safe from depredators. Cisterns for the barn and house are also needed, and for the preparation of these, cement is indispensible. Rain water is much better for washing than well water. It is also much better for cattle, and saves a great deal of time, in watering them. Make a reservoir under the barn, to catch all the rain that falls from the roof.

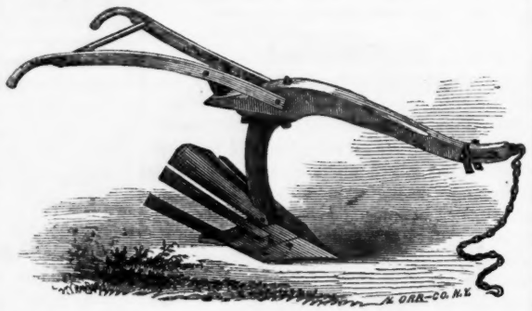
Potatoes Mixing in the Hill.

To the Editor of the American Agriculturist:

This question has been recently started in the *Agriculturist*, and is one worthy of being thoroughly investigated. In the face of your emphatic declaration that, potatoes mixing in the hill, or, as I should say, mixing at the *root*, "is contrary to reason and general experience," I am willing to enter the lists in defence of the affirmative of the proposition.

Your correspondent, I. S. Merrill, has given a case in point, and while I have no doubt of the fact as he has stated it, I apprehend his conclusions are at fault, when he says, "that the mixing was produced through the *blossoms* I readily admit." Now, if this is correct, how do you account for the fact that *sweet* potatoes, a plant that has never been known to bloom in this latitude, are very readily *mixed at the roots*! I will undertake to do it to order, from pure seed of the red and yellow varieties, to be furnished by yourself or any other gentleman, and pledge myself beforehand that the product shall be as "ringstreaked and speckled" as Jacob's sheep, by a process most simple; just try it yourself. Take a sprout of each variety, and place the two in the same hill, and, my word for it, you will have as perfect a mixture as you can desire. Plant a dozen hills, and at least half of them will be mixed. This is a fact which is familiar to almost every sweet potato-grower in New Jersey, and has repeatedly come under my notice for nearly 50 years. I have had a perfect mixture of the Mercer and Foxite varieties of the common potato at a distance of 8 or 10 feet. A. B.

Gloucester Co., N. J., Aug. 10.



A New Potato Digger.

We present above a cut of a recently improved implement for digging potatoes, got up by R. L. Allen, of this city. The form of the instrument is so well shown by the engraving, that a brief description will suffice. The lower part or share, is of cast iron, in shape like a flat double mould board plow. The prongs are of wrought instead of cast iron, and each is bolted, independently, on to the share. In these respects, as well as in their greater length and the turn given them, we think the improvement is very decided over any previous implement of the kind. By running the Digger under the center of the rows, and just below the potatoes, the soil and the potatoes are turned flat over, leaving the latter on the top. We have not yet had an opportunity of seeing it work, but understand from several farmers in this neighborhood, who have used it for a few weeks past, that the operation is highly satisfactory. This implement, as will be seen from its form, would make an excellent cultivator for stirring the soil.

Top Dressing and re-seeding old Meadows.

To the Editor of the American Agriculturist:

I attended to this operation last week for a small bit of meadow, and the benefit is already so apparent, after a Summer shower, that I am constrained to say a few words about it. The common practice of taking up meadows every few years, for the purpose of manuring them, and stocking them anew, is a very expensive one. It is the practice of some cultivators in England, and of not a few in this country, to keep a portion of their meadows perpetually in grass. This is the natural crop of the soil, and if there be any exception to the economy of a rotation of crops, it would seem to be this. I have now in sight, from my window, a meadow that has not been plowed for the last thirty years, and yet it produces annually not far from four tons to the acre. It is always mowed twice and sometimes thrice in a season.

It will perhaps be objected to the Summer dressing, that much of the manure will be evaporated by the sun. This might be the case if green stable manure were applied. But compost, such as is prepared in the open yard, or pig sty, is not liable to lose much of its strength, even in the heat of Summer. The muck absorbs the ammonia and salts, and holds them until they are released by the rains, and carried down to the roots of the grasses. The first heavy shower, after the dressing, will change the grass to a deep luxuriant green. The compost should be made as fine as possible before it is spread. Where there are bare spots, or where the grass is thin, seed should be sown. The compost may be more uniformly distributed by going over the ground with a bush harrow, after it is spread. This will also bury the seed, and help its germination. If meadows were top dressed, every third or fourth year, there would probably be little occasion for re-seeding. It is upon poor thin grass that the worms prey most, and that the Winter frost has the worst influence. Abundant fertilizers make strong roots, which take a deeper hold upon the soil.

Farmers, who have the usual means of making compost—a good stock of animals and a muck swamp—have no excuse for neglecting their meadows. From my own experience, and observation, I am persuaded, that top dressing is one of the best uses, to which yard and compost manure can be put.

It will cost the farmer say fifteen dollars for ten cords of compost, made upon his own premises; and two dollars more for a peck of herds grass seed, and eight pounds of clover seed. This, spread upon almost any acre of meadow yielding less than a ton of hay, would increase the product at least a ton, annually, for three years. Estimating this at eight dollars a ton, standing, and we have twenty-four dollars for the sixteen expended, or 50 per cent. This is a better return than the farmer often gets for his manure.

The best crops of grass grown in this vicinity are secured by judicious top dressing. It makes a thick strong turf, very smooth, and just the place for the use of the mowing machine. The first part of the present month is a good time to apply the dressing, and the seed. The roots will become established before the Winter sets in.

Eastern Connecticut.

Remark.—We have usually advised burying manure *in* the soil rather than exposing upon the surface to sun, wind and rains. Still there are many instances, like those referred to above, where, on the whole, it is better to top dress a meadow than to be at the expense of plowing or re-seeding; provided always, that it be done on soils which absorb all the rains that fall upon them. If water at any time runs *over* the surface, into open ditches or elsewhere, much of the manure will be washed away and wasted. The time of application also makes some difference. Manure placed upon the surface in Autumn is sooner washed into the soil by frequent rains, and is less exposed to evaporation, than if applied in the Spring to lie upon the surface through the Summer.—Ed.

Reports on Crops--A Model.

We are glad to get as many reports of the state of the crops as possible, but too frequently they are so "long drawn out" that it is half a day's work to get at the essence of twenty or thirty letters that arrive in a morning mail. The following postscript to a business letter printed just as received, we consider a good model.

"Sennett, Cayuga Co., N. Y., Aug. 7."—Our

Red Wheat is very heavy, yields from 20 to 35 bushels per acre. White Wheat is very poor. Spring Wheat I never knew so good before. Barley light. Oats a good crop. Corn very promising, Potatoes show rot.

J. R. PAGE.

Still Slops for Geese and Ducks.

To the Editor of the American Agriculturist:

With all the late "stump-tail" milk investigations of our New-York committees staring us in the face, I have some faith in the virtue of Still Slops—when properly used. I do not believe that Still Slops, free from poisonous admixtures, when run off from the *pure* grain—and *nothing else*—cooled, and mixed with good hay, or grass, hurts nothing of the cow or sheep kind, to say nothing of hogs. It is a palatable, nutritious food for many kinds of farm stock. It is from the abuse of the article in feeding nothing else with it, hot, as it comes from the vats, and the creatures fed upon it in a nauseous state of filth and confinement, that its evil influences come. Mark, that I say nothing of Still Slops where strychnine and other poisons are used in manufacturing whisky.

But I now have a word or two to say on fatting geese and ducks, both of which are profitably raised and fed for market under favorable circumstances, or may be an unmitigated nuisance under others. I have reared both these varieties of water-fowl many years, having good conveniences for them, and have found them exceedingly convenient as an article of family diet, as well as a marketable commodity.

Last year, a large distillery being erected in our neighborhood, we commenced in the month of September feeding geese and ducks with slops, which we got for ten cents a barrel. We made some cheap troughs, a dozen feet long, of two boards six inches wide, in shape of the letter V, and fed the poultry twice a day with all they would eat, letting them run at large, as usual, with free access to water and grass. They ate it voraciously, and fatted and grew rapidly; and when slaughtered, their flesh was fine and delicate. I am decidedly in favor of Still Slops—thus fed—for water-fowls, as being both cheap and nutritious; although it is not so *hearty* food as pure Indian meal.

For hens and turkeys, it is not so good, being apt to scour them, and I would not try to *fat* them on it unless mixed with an equal quantity of pure meal or boiled potatoes. For those who can obtain Still Slops at a low price it is certainly worth the trial.

EXPERIENCE.

Feed for Chickens.

To the Editor of the American Agriculturist:

According to a former number of the *Agriculturist*, a subscriber living at Rock Island, Ill., found it difficult to raise chickens. So did I, while I fed them fine Indian meal. I improved by mixing whole buckwheat, rye and wheat with Indian. At last I had corn cracked the average size of rice or samp, which I fed to them while young, and increased the size as they grew older. Before they were as large as quails they would scamper for the largest pieces.

I find they do best to run out after the dew is off the grass, but should be kept in during wet weather. Since I commenced this plan of feeding, my loss has not been over five per cent. Last Spring I had 70 chickens hatched, and lost but 3, and one of them was killed by the coop falling on him. I hope "Rock Islander" will try this method and publish the result.

NEW-JERSEY SUBSCRIBER.

Tim Bunker on Making Tiles.

MR. EDITOR.—I didn't like it a bit, that you did not come out to attend Sally's wedding. You must know, that weddings do not come every day in a farm house, and in mine they only come once in a generation, for Sally is my only daughter. She had got her heart very much set upon seeing you out here, for she and John have read the paper so much, that they think you sort o' belong to the family. John came back with that young buck of a reporter you sent, quite crest fallen—declared he wouldn't have gone to the depot if he had known you were going to disappoint him. He says he has made up his mind, since reading that account, that all the green things in the world, are not in the country. Whether he means that some of the houses in the city are painted green, or the folks in them have that look, perhaps your reporter can tell. The girls however were amazingly tickled with the man's description of the Hookertown women, and are a good deal provoked that you didn't publish the poetry and all. They say if you will put in the part that you threw out, they will pay double price for it, as an advertisement. I suspect they have a great itching to know if he said anything more about them. You had better keep him at home in future, if you want him to do any thing more for the paper.

I told you, awhile ago, that if you wanted to see anything of the Hookertown, of the present generation, you should come soon. I was a good deal more of a prophet than I thought of at the time, for the paper was not dry, on which I wrote it, before I heard that a tile factory had been started in my own neighborhood.

"Who would have tho't it?" exclaimed Seth Twigs as he knocked the ashes out of his third pipe, and rose to go. "Why Esq. Bunker, that is the strangest thing that has happened in my day. I should as soon expect to hear they were catching whale in the Connecticut River."

"And do you think there will be a call for the tiles?" inquired the minister, whose conservatism was a little disturbed by the advent of a tile factory in his parish.

"Trust Miles Standish for that," answered Deacon Smith. "The fact is, Standish, never went in to anything yet, that he did not see his way out of it, before he started."

"Blamed if he hasn't got it all ciphered out," said Twiggs. "Showed it to me 'tother day when I was up there."

"And how many does he calculate to sell," I inquired.

"A hundred thousand the first year, and half a million the second. Had the hundred thousand engaged before he started."

Miles Standish, you know, is a historic name, one of the first Puritan families that landed upon the shores of New-England, and here is the family, in direct descent from the first Miles, in the seventh generation. The present Miles owns the ancestral farm; and on one corner of it is a clay bed, of unrivaled excellence. It has been used for some years as a brick yard, and many a kiln has been sent off to the neighboring city, and down the river. But the reverses of last year stopped the demand for brick, and Miles has been in trouble ever since, until I hinted to him carelessly last Spring, that he had better go to making tiles and drain his farm.

I have since read somewhere, that this is the way they do so much draining in the old country. The tiles are made upon the farm where they are to be used, to a great extent, and there is very little paid out for freight. The owners of the large estates there have plenty of capital for the purpose, and tiles are made and put down by the million. But it will probably never be the best way, with us, for every man to try to make his own tile. Our farms are too small, and as a rule, our farmers have not the necessary capital, even if they have clay beds. What we want is a tile factory in every neighborhood, or district of twenty miles diameter or less; so that a farmer with his surplus team can cart tiles to his farm in the leisure parts of the year. He can, in this way, make his team serviceable, which would otherwise lie idle. He will not feel the expense of freight at all.

As matters now are, freight is the great bugbear which prevents people from going to draining. The two inch tile, which cost twelve dollars a thousand in Albany, about double the first cost by the time they get where an Eastern farmer wants to use them.

Hearing of the tile factory I went up to see it yesterday, and to have a talk with Standish about it. I found the hint I dropped in half joke last Spring had fallen into good soil, and was bearing good fruit. He had got it all ciphered out, as Seth Twigs said.

Said he, "Esq. Bunker, I've thought a heap of what you said about turning my brick-yard into a tile factory, and you see I've partly done it. The only thing that stumbled me was, whether I should have any market for the tile after I got them made. I looked over my farm, and found that I could use at least fifty thousand in draining some swales, and if these worked well, I should probably want more. I went round some into the neighboring towns, and found a good many who wanted to try the experiment, and were willing to engage from one to ten thousand a piece. I marketed a hundred thousand. You see I had a plenty of brick to make a kiln of for burning, and this at the market price for brick cost me about a thousand dollars. The iron machine for moulding tile that you see there, cost 150 dollars, and the drying house perhaps 800 more. So that any man, who owns a brickyard with the usual fixtures for grinding clay, wants about two thousand dollars capital to start the tile business with, on a small scale. I can burn sixteen thousand tile in that kiln at once, and it takes about ten cords of wood to do it. The actual cost of moulding, not counting the clay anything, or the interest of the money, is about two dollars a thousand, and the burning, where wood is four dollars a cord should not be over five dollars. This brings the actual cost of two inch tiles, not far from seven dollars a thousand. If I can sell them at twelve dollars a thousand, even though it costs me something to deliver them at the river landing, I can make a handsome profit. If the thing works half as well as you claim, there can't fail to be a better demand for tile, than there ever was for brick."

This Hookertown clay bed is one of the best you ever saw. You work right into a side hill, where the clay is fifty feet deep, or more. It lies in nice layers about the thickness of slate, and is entirely free from sand and gravel. It makes a very tough tile. There is clay enough right here in this valley, close to a navigable river, to make all the tiles the State will ever want.

The first tile factory in Connecticut is a great event, and will work as great changes among us, as the first cotton factory did in Rhode Island. It will double the products of our farms in less than ten years, if the farmers will use them. It

is wonderful to see the waking up, on this subject. I don't know as I ought to speak in meeting, but I thought you would like to know that Jake Frink has engaged five thousand tiles, and is going to put them down this Fall. It wont be a year before Jotham Sp. rowgrass will have them down in his drained swamp; but he will never own that he is draining land. It will only be another contrivance to keep out the muskrats, and the tadpoles. A very *curis* man is uncle Jotham. Yours to command,

TIMOTHY BUNKER, ESQ.

Hookertown, Ct., August 3d, 1858.

REMARKS.—We are really sorry for the disappointment felt by our Hookertown friends, at our failure to appear at the wedding—but could not help it possibly, under the circumstances. We will do anything by way of atonement—attend Sally's second day wedding, or the next wedding that comes off in Hookertown, should any of the damsels see fit to get up one on our account. We shall not dare to send any more reporters.

ED.]

Wheat Sowing.

We hear many complaints of the total, or partial failure of the wheat orop, in various sections of the country. In some places it has been winter killed, in others smitten by rust, and in many others cut off by the insects. The truth probably is, that, excepting destruction by insects, there is about the same amount of injury received from these sources as occurs every year. The business of collecting information from the wheat-growing districts is now so systematized, that we hear much more of the failures, than we were accustomed to, ten years ago. Whole columns of reports are published in the daily newspapers, and the story of failure in fifty counties of the union makes a great impression. Wheat has never been so certain a crop as Indian corn. It is a more captious plant in its wants, and must have more careful attention. It demand a porous soil, rich in vegetable matter, such as is found in the newly cleared lands of the West. In old lands *the mechanical preparation of the soil is* a matter of prime importance. The more nearly you can make it like the virgin soil the better. If it be not already dry it should be made so. The soil should be deeply stirred with a subsoil plow to let the rains pass down quickly, and to give air to the roots of the plants. More wheat is winter killed by stagnant water freezing around the plants, than by any other cause. The deep stirring of the soil is also a help in Summer, guarding the crop against drouth. If the land is not underdrained it should be plowed in narrow lands, with deep dead furrows to give the water a chance to pass off into them.

Sow Early.—The experience of wheat growers is very uniformly in favor of early sowing. The sooner it is put in after the first of this month, the better. The roots have time to get a strong hold of the soil and are not easily thrown out by the frost.

Select your Seed.—This may be done by threshing the bundles only partially. A few strokes of the flail will knock out the plumpest kernels. Some of the fanning mills have riddles for this purpose, runing the smallest kernels through, and saving the large ones for seed. Attention to this matter is of great importance if you wish to keep up the reputation of any given variety. The early red varieties, such as the pure Red Mediterranean are most reliable against insect ravages.

Use a Drill, if you cultivate wheat in any considerable quantity. It will soon pay for itself in the saving it makes in the seed, and in the larger yield per acre. If without a drill, plow in the seed with a shallow furrow.

Manures.—Do not be afraid of making the land too rich. Wheat will not grow where buckwheat, and some other grains might yield a tolerable crop. Barn yard manures are always good and safe. Ashes, lime, plaster, and clover turned in green will each and all pay, in certain conditions of the soil. As good wheat can be grown now as ever, in the oldest parts of the country, if cultivators will heed these suggestions—except where the insects happen to abound for the time being.

Sow Rye Early.

To the Editor of the American Agriculturist:

Of all the crops raised in this northern climate, rye is, perhaps, the surest; but even rye, sure as it is, may fail, and that too, in a good season like the present. A neighbor of mine sowed part of a field with rye on the 25th of August, 1857, and the balance of the same field the last of October, land and seed both alike. The result was, a good crop on the portion first sown, estimated at 20 to 25 bushels per acre, while that sown late was not harvested for the reason that there was nothing to harvest. I have known similar instances almost every year, and yet there are those who continue to throw away their seed, lose their labor and the use of their land, because they have known a good crop raised on new cleared land, sown so late that it did not come up till Spring. J. TALLMADGE.

Saratoga Co., N. Y.

Two $100 Prize Articles Wanted.

FENCING—DAIRY.

After repeated attempts, we have partially failed to obtain just such articles as we desire, upon two of the most important topics connected with farm life. We therefore offer a premium, or remuneration, of one hundred dollars for the best short series of articles upon FENCING, and the same sum for another short series on DAIRY operations.

We desire plain, straight-forward, practical, common-sense articles, such as only experienced and observing men would write. We care nothing for the literary style—that we can attend to—only so that they give such detailed instruction as working men need. Discussions of uncertain or doubtful theories, or of the history of fencing or dairying, are not desirable. The shorter the series the better, if embracing the main features of the subject. If written so plainly as to be appreciated and understood by the mere tyro, they will be all the more valuable for those familiar with the subject. If so valuable as to be worth more than the sum above offered, on account of the time and skill expended, more will be cheerfully paid. Any requisite amount of expense for engravings to illustrate the subject, will be furnished. If desired, the writers may retain the copy-right of their productions.

The articles are desired to begin in the earlier numbers of the next volume of the *Agriculturist.*

"Come! get up—you've been in bed *long* enough," said the gardener when pulling carrots for market.

Pride is as loud a beggar as want, and a great deal more saucy.

Farm Buildings....VII.

BARNS.

In submitting a plan for a barn, we are aware that in its convenience and arrangement it must be subordinate to the position, the uses, and climate of the farm itself. A very good barn accommodation for one farm may be a very poor one for another, and the *principle* on which it is founded must be the main object in its structure, leaving its arrangement, and completion to the judgment and convenience of the proprietor, subject only to the particular use he wants to make of it.

For instance: a grain barn requires, principally, bays, scaffolds, and granary, with a place for threshing, and cleaning apparatus, horse power, bins, &c. A miscellaneous stock barn requires bays, and scaffolds for hay, a bin for storing meal and grain for feeding, and commodious stabling, with contiguous yards and sheds well supplied with racks. A dairy barn requires the same, with particular accommodation for cows, their warmth, comfort, and shelter. The three different objects may, in fact, be combined in a general plan, and used for either, with but little alteration, or temporary fitting up, if properly planned in the beginning; and as our object is chiefly suggestive in what we have to say, and submit, we can only deal in generals.

There are usually two different styles of barn adopted by our farmers, depending somewhat on the position of their site, and the use to be made of them, viz: *the bank, or side-hill barn*, with underground stables; and *the level or above-ground plan*, with little or with no underground room at all. We propose to give a plan of each, with the best features attached for general purposes. In prefacing either plan, however, we shall bear in mind that, being *but* a barn no more expense need be lavished upon it than is absolutely necessary for economy in storing, and expending the crops, and sheltering the stock of the farm. It is a rough building, for rough purposes—not a dwelling for man, but for beasts. Therefore, anything expended upon it beyond the security of these objects is so much capital wasted, and not chargeable to farm economy, and management. A fine house elaborately finished, may give satisfaction and enjoyment to its inmates sufficient to compensate a large outlay; but a barn aside from its outward appearance to the eye, involves no such necessity. The dumb brute within it, quietly eating its accustomed forage, or resting in its comfortable bed, is quite as content and thrives as well as if its apartment were planed and painted, and so that its physical welfare be promoted, is quite as well in the plainest, as in a fanciful tenement. We have known a barn costing five thousand dollars less valuable intrinsically, as a barn, than one of the same accommodation costing fifteen hundred, while the latter was also in better keeping with the farm itself. Consequently, in all that appertains to barn arrangement we shall advocate all of cheapness that is compatible with durability, security in storage, and stock accommodation. We first give the plan of a

BANK, OR SIDE-HILL BARN.

[*See next page.*]

This, it will be seen, is set in the side of a slope or moderate hill, facing to the east, or south, with a stone wall underneath, 7½, or 8 feet high from the ground. The rear wall runs into the bank, and is on a level with the ground above, while the front is on a level with the lower plain or area. The foundation walls are 60x50 feet, the front

enclosed part retreating 12 feet under the body of the barn above. This front under-wall may be of stone, or not, at pleasure, a stone foundation, with wooden posts resting upon it, and boarded or planked, being quite sufficient for all purposes of shelter or warmth. A wing of stone, 12, 14, or 16 feet in length, according to the desired width of the outer sheds, may stretch out on each side as a butment for the sheds to rest upon next the barn, and keep the rear earth bank in place, while the sheds may be of any width desired, and extended out on each, or either one of the sides, at pleasure, with racks or mangers for cattle feeding. The frame of the barn above extends over, to give open shed room in front of the wall beneath, and where forage may be thrown from the barn floor above for the stock below, or to be worked into manure in the yard.

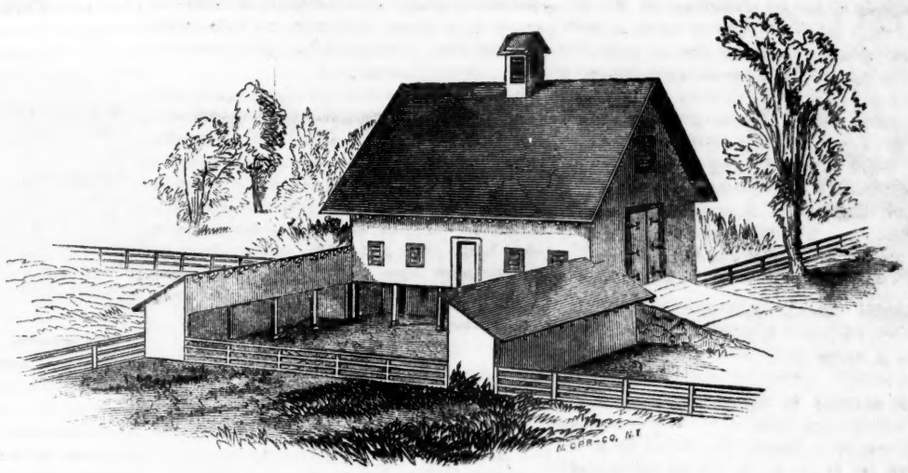


Fig. 1—BANK OR SIDE-HILL BARN—ELEVATION.

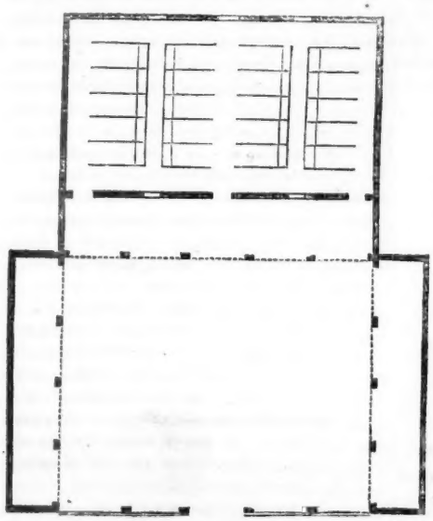


Fig. 2—UNDER GROUND PLAN.

The frame of the barn above is 60x50 feet with posts set upon stones below, to support the overshot sill as shown in the ground plan. Underneath are 4 lines of stalls, two on each side of the center passage-way, heading each other, with a 4 foot feeding alley between them, receiving the forage from above, from which it is thrown into the mangers 2½ feet wide, to which the cattle are tied or chained. The stalls are double, allowing two animals, if neat stock, in each. They are tied at the sides next the partitions, to prevent injury to each other. On the hill side are three windows in the upper part of the wall to admit light and ventilation, either glazed, or grated, as may be necessary.

MAIN FLOOR PLAN—(Fig. 3).

Entering the barn at either end, as shown in the engraving, is a floor, either 12 or 14 feet wide, as may be most convenient, which passes through the entire length. On one side is a large bay for hay or grain in the sheaf. Opposite, in part, is another bay. Next to that a passage of 5 feet wide to carry out straw, or hay to throw down below into the yard. Next to the passage is a granary, and adjoining it a tool house, or area for threshing-machines, straw-cutters, &c., with a partition off from the floor, or not, at pleasure.

Nine feet above the floor, on each side, should be a line of girts, connecting the inner posts, on which may be thrown loose poles to hold a temporary scaffold for the storage of hay, or grain in the sheaf, when required. By such arrangement the barn can be filled to the peak or ridgepole, and the ventilator above will carry out all the heated air and moisture given off from the forage stored within.—Slatted windows, or side ventilators are in the side next to the yard, if required. The roof has a "third" pitch, or one foot rise to two feet in width, which lasts longer, and gives more storage than a flatter one.

An essential feature in all bank or side-hill barns is, that they be well banked with earth, so that the falling water may freely pass away from the walls, and the stables and yards well drained. Without such precaution they are little better than a nuisance, the rains, and melting snows flooding everything beneath the building, and in the yards and sheds below. We had occasion a few years ago to occupy an otherwise well built barn for the Winter with a considerable stock of cattle; and although there was abundant stable room, for want of proper filling in and embankment on the hill-side, every rain poured in so as to flood the poor animals most uncomfortably. This is a part of the work, therefore, which should receive the most thorough attention.

We can not say that under all circumstances, even with a good site, we would prefer a side-hill barn; but if so, we should take extraordinary precaution to secure it from frost and wet, by the most thorough filling, embankment, and drainage.

Its advantages are: the warmth of its stables in Winter, and their coolness in Summer; storage for roots, if required; much additional room under the same roof, but not, we think, at diminished expense; and great compactness of storage, over that of the common plan.

We had almost forgotten to say that a flight of steps should reach from the upper floor to that below, to pass up and down upon, and these may be placed where most convenient, or available.

As to the material of which the barn should be built, a stone-wall foundation, well laid in mortar, or not, depending for this on the kind of stone used, with a wooden frame and covering, is the cheapest, and, as we think, the best; and as to the manner of framing and building, every farmer is too familiar with things of the kind to need our instruction. In general, we can only say: build *well*. One good building is worth two poor ones, and a barn should be put up for a life time. A small extra sum expended for convenience is soon repaid in the time and labor of those who perform its duties, or use it for storage alone. A barn should, in fact, receive as much the study and attention of the farmer as his dwelling; for in the barn is stored, expended and produced a large share of his wealth; and he might as well expect that his household would live contented and happy in a wretchedly contrived house, as his laborers, and the beasts they look after would be so in an illy constructed barn, and stables.

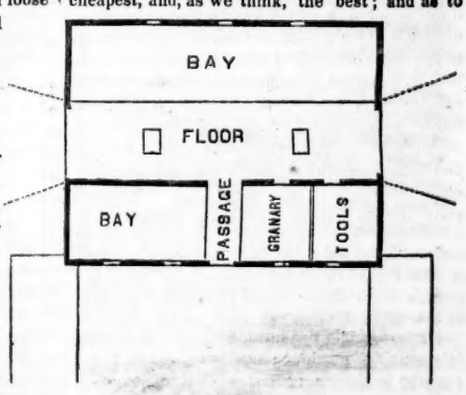


Fig. 3—MAIN FLOOR PLAN.

HARD ON A FAT MAN.—A corpulent gentleman had been so crowded in traveling, that when about to journey from Macon, France, in a diligence (stage,) he sent the hotel boy to pay for *two* seats in advance. When the vehicle called for him, he found himself booked for two seats as had been directed, but one of the reserved seats was on the inside and the other on the outside.

Cheap Cisterns.

Cheap cisterns have fallen into some disrepute, of late, through the impositions of certain traveling cistern-builders. A few years ago, numerous quacks went through the rural districts in various parts of the country, proclaiming that they had invented a new plan for building cisterns. And not the least attractive part of their method was its superior cheapness: five dollars would do the whole. Their wonderful new method was simply this: They dug a hole in the ground, large enough to contain 25 barrels of water. The hole tapered gradually from the top to the bottom, and was shaped like many stone-jars. After being excavated smoothly, it was plastered over upon the ground itself, and then the top was covered with planks. This method answered very well for the Summer months; but, if built where the frost could reach the cistern, its fate was sealed in the first Winter: the frost heaved the earth and plaster into the cistern, and "the patent, cheap, and durable water-holder" was no more.

An improvement on this style of cistern can easily be made, as follows: Excavate of the size wanted, and in the shape above-mentioned, for its obvious utility in plastering. Choose, if possible, stiff, clay soil, and a sheltered position. Cover the bottom with flat stones or with brick laid in water-lime cement, and plastered over with the same. The bricks must be hard and well burned, and the cement made of water-lime mixed at the rate of one-third lime with two-thirds sand. Lay up the sides with one course of brick, putting a good coating of water-lime mortar, as you go, between the bricks and the earth behind. When you reach the top, lay across the opening several stout joists or locust timber, and cover with thick planks. An opening should be cut out in these plank, for the curb; and this should be large enough to allow the descent of a man to clean out the cistern. Then cover the whole platform with soil enough to exclude frost.

Farming by Machinery.

We hail gladly the introduction of every good labor-saving machine; and we rejoice to see that the prejudice against such implements is disappearing from the public mind. It is becoming plain to every one, that the substitution of mechanical forces for mere muscular strength tends to elevate mankind. Men are changed by it from machines to makers and controllers of machines. Instead of going the same round of hard, wearing labor, from generation to generation, like a blind horse in the tread-mill, they may now throw very much burdensome toil upon machinery; may subject the powerful but blind forces of nature to the control of the human will. If wood and iron can do much of the drudgery of life, just as well as human sinews, surely it is better that they should do it. If by the aid of a horse and a cultivator, one man can till as much land, as ten men with ten hoes could do their work, surely, there is a great gain. So with all substitutes for the expenditure of human strength.

To us, the great argument for machinery in agriculture is not its cheapening effect, but the relief it gives the farmer from wasting toil, and the opportunity it affords him for self-improvement. Its tendency is to elevate, as well as to make him rich. Its tendency is to make farming attractive, no less than profitable. Well has a writer observed: "Machinery, regarded as a means to banish man's slavery to toil, by substituting brain-work for the labor of the hand, is the high road to that fuller and more perfect development of society, which poets have painted, philosophers predicted, and revelation, it is believed by many, expressly predicted."

Economical Hints.

1. Have a work-bench and a few tools in your woodshed, or in a little room at one end of your barn. There are many small jobs, in the course of a year, which any man of common ingenuity can do as well as a professed carpenter. And there are many rainy days and "odd spells" when these jobs can be done. And how much running to the village, and how much waiting and patience this would save!

2. Have a place for everything, and everything in its place. Those tools—why should they be lying around, the auger here, the jack-plane there, and the saw yonder, and the adz and screw-driver no where? Don't put away a shovel, hoe, spade or any implement without cleaning it. This may seem needless care, but in the long run it is a saving of time and money. Rust corrodes and weakens the best made tools. There *are* men who leave their plows standing in the furrow, or lying by the side of the fence from one year to another. And the "bran-new" scythe is often left dangling from the crotch of an apple-tree, month after month. Hear what a sensible farmer says: "Drive in stout, wooden pins to hang your yokes upon, nail strips of board from joist to joist to hang chains upon, make a rack overhead for pitchforks, rakes, turning sticks," &c. To all of which we respond: So let it be!

Blinks from a Lantern.....No. III.

BY DIOGENES REDIVIVUS.

A NEW LOCATION FOR FARMS.

I have hitherto looked for a good farmer upon the farm, with very little success. I now purpose to change the process a little and look for a good farm *in* the farmer. For I have made up my mind, that this, after all, is the true location of the farm. Man is a sort of walking photograph establishment, realizing, in form and color, the ideas that are floating in his mind. One man is born a carpenter. He has a natural tact for making boards smooth, and framing timbers together. The sight of a chest of tools always gives him pleasure, and he loves nothing so well, as to saw, hew, plane, and bore. He realizes his ideal of blessedness, at an early age, in a carpenter's shop. Another is born a poet, has a lively sense of the beautiful, and an ear for rythm. He is thrilled with music from childhood, catches every song that he hears sung by enchantment, and begins to rhyme long before he learns to write. The epics, the lyrics, the odes, that make him immortal, are all in his soul before they get into books.

Now Diogenes is decidedly of the opinion, that this is true of every man's life work; as true of workers in dirt, as of workers in marble, and in letters. The thing formed must first be in the mind, before it can have expression in material forms.

Here perhaps is the great difficulty in finding good farms. It would be a very curious picture gallery, if we could go into a hall, and see it hung all around with the ideal farms which men have in their minds.

The minds of many who cultivate the soil are a perfect blank as to their calling. They have no love for it. They only look upon the farm as a machine for producing corn and potatoes. They have about the same affection for it, as the boy has for the crank of the grind stone. It is a necessary evil, from which they mean to be delivered as soon as possible. Now with this idea in a man's mind, it is clearly impossible for him to make a good farm. It would be miraculous if such a man ever attained one.

Other's have no objection to the labors of the husbandman, but they have no perfect plan of a farm that they would like to realize. They have correct ideas of certain points in farm economy, fancy good horses and fine stock, a smooth meadow, or a clean grain field, but they have no conception of the details of the work, by which these things are realized. So the horses they own are likely to be any thing else, than the horses they admire, and the brood mares they keep are likely to be old broken down animals, unfit for work. The meadows they cultivate, quite likely are full of rocks and stumps, and the fences lined with a row of brush, that would almost serve for a hedge. The barns they have are without cellars—without convenience for feeding, for watering or for saving the manures of the animals stabled. If the stables are in the right place, the hay mow is where it ought not to be. There is no adaptation of means to ends, in any department of the farm. Whatever is known is not known to any good purpose.

There are others, a very few, who are born with the map of a farm in their brains. They seem to understand at a glance what needs to be done on a given farm, to adapt it to a given department of husbandry. In looking over a place for a day, they would make up their minds, whether it could be best worked as a dairy farm, a stock farm, a sheep farm, or for a mixed husbandry. They would not purchase a piece of land until they had judged of its capabilities, and determined what to do with it. They would have this matter as definitely settled in their minds, as the carpenter who should purchase a lot of lumber, with which to build a house, the plan of which he had already drawn. Most farms purchased are only the raw materials of farms. The man, who has a farm in his brains knows just what to do with this material, the moment he comes into possession. The farm is not only a machine for raising crops, but for doing this economically. If the farm buildings are to be located they are placed with reference to economy, in carting the manures and crops to it from the farm. Diogenes during his long search with his lantern, for a genuine farmer, found one cultivator whose error in this respect has done more than all other causes combined to keep him poor through life. Instead of having a compact farm, with the buildings near the middle, his land is scattered in a half-dozen different plots, some of it a mile-and-a-half or two miles from home. He has wasted labor to the amount of several hundred dollars annually, in this unfortunate location of his fields. This alone, saved, would have made him a rich man, at the close of fifty years, the period for which he has cultivated the land.

The man who has a farm in his brains, also sees what improvements are feasible. Here are certain small lots, whose walls have always been in the way of cultivation. The fences are at once

removed. There are rocks and stumps in the way of the plow and the mower. These fields are cleaned up. Again, the swamps and low lands need drainage. The tiles are laid down, and tracts of land that were a nuisance are turned into fruitful meadows. He studies the capabilities of his farm, as he becomes acquainted with it, and turns them to the best advantage. He transfers the farm in his mind to the acres around him. Such a cultivator is an artist, as much so as he who carves in wood or stone. There is as much room for genius and for fame in this work, as there is in the cultivation of the fine arts so called. For, alas! good farmers, who are true to their calling, and ennoble it, are even more scarce than poets, painters and sculptors. Diogenes hopes to live to see the day, when the proper definition of a farmer shall be—*a Soil Artist*. Now he is too often an unskillful dauber in mud. He defaces, and murders the soil, which he should beautify and improve. He has no model farm in his brain, and for that reason he never has one elsewhere.

Old Time Agriculture in America.

INTERESTING REMINISCENCES.

Our New England fathers pursued farming under difficulties of which we have little conception. The country from which they emigrated was further advanced in civilization, and better tilled than any then on the globe; and this they exchanged for one entirely new to them, and for a soil and climate unlike those of which they had before some experience. Thrown into a savage wilderness, their knowledge of farming on the smooth plains of the old country would avail them but little. Almost everything must be learned anew, and their knowledge of farming in America must be acquired by slow and painful experience. Who will wonder, then, that their progress was slow! Rather, let us wonder that they did not succumb to the difficulties and hardships.

The early settlers had no beasts of burden for many months after their arrival. And when at length a few cows were sent over, being poorly fed on coarse meadow hay, many of them drooped and died, and others surviving this, were killed by the wolves or the Indians. Besides, the difficulty and cost of importation were then so great, as to raise their price above the means of ordinary farmers. In the year 1636, cows sold from twenty-five to thirty pounds sterling, $125 to $150, and oxen at forty pounds a pair. The cattle, too, were greatly inferior to those of the present day. The ox was small and ill-shaped, and the horse very unlike the noble dray-horses of Boston and Baltimore of the present day, and the sheep were inferior, both in size and form, and in the fineness of the wool. In 1638, there were no horses in the Plymouth colony; and history tells us that one John Alden, the rival suitor of Miles Standish, carried home his bride "on the back of a bull, which he had covered with a piece of handsome broadcloth, he leading the ungainly animal by a rope fastened to a ring in its nose."

Agricultural implements could then be imported from the mother country, but all persons could not afford to obtain them in this way. A farmer of the present day would not think the best of them worth much, they were so rudely made, so heavy and unwieldly. Many of their tools were made from bog-ore, the only metal then to be had, and were very brittle and easily destroyed.

Twelve years after the landing at Plymouth, the farmers of the colony had no plows, and were obliged to prepare their lands for seed with the hoe. As late as 1637, there were only thirty-six plows in the whole of Massachusetts. For a long period after this, the State paid a bounty to any one who should buy and keep a plow in repair, making it his sole business to go from farm to farm, breaking up land. This must have been a real plow-man!

It was a great advantage, surely, to the first settlers, to acquire the use of the several new plants employed by the natives for food. Yet it took some time to learn how to cultivate them, and hardly less, how to relish them. Indian corn was one of these plants; and pumpkins, squashes, potatoes and tobacco were almost equally strangers to them. It is said that the potato was so rare in England, at the beginning of the 17th century, as to be used only in the smallest quantities. "It was sold at two shillings a pound for the Queen's table, and was used as a fruit, baked into pies, seasoned with spices and wine, and sometimes eaten with sugar."

The colonists adopted, to a great extent, the Indian mode of cultivating the plants above named, and, as the times then were, it answered a good purpose. For example, like the natives, they planted their corn four feet apart; and those living near the sea-coast, manured their plants in the hill with horse-shoe crabs; those living on streams in the interior used fishes for the same purpose. They planted beans among their corn, that the former might be supported by the latter. They hilled their corn about two feet high, supposing it necessary to sustain the stalks.

An Honest Cat.

To the Editor of the American Agriculturist:

In the March *Agriculturist* the question was asked, "Did any body ever have an honest house cat?" Not having seen an answer to the above, I come to the aid of the too oft abused cat, and reply that I have seen several which I considered worthy the appellation, foremost among which is the subject of this sketch.

But first I dislike the idea contained in the article above alluded to, viz: that house cats were intended mainly to be pulled about by children, which is the chief cause of their indolence and thievishness. Need we wonder at their inactivity, when we observe the abuse they meet with at the hands of children who drag them about by the tail, ears or legs, whichever is reached first, and too often kicked out of the way by other members of the household! It is only a wonder that they have energy to move when life is in danger, and we can scarcely blame them for obtaining, in a stealthy way, that which hard treatment disables them from procuring honestly.

But to return to our house cat, "Timmy," as he is called. He is what the writer alluded to styles a "wether cat," (and we would never have any other). Tim is a Maltese, three years old, weighing about 10 lbs., and was adopted when four weeks old. He was always a pet of the children, playing and frolicking with them, but never abused, ranging the house with impunity from garret to cellar, pantry, milk-room and meat closet included. He is fed from the table at every meal, with meat and vegetables to his liking, but generally choses the latter now that he is old enough to catch his own meat—in doing which he soon freed the premises from vermin. He never leaves home, nor allows intruders to infest the house or barn, or even remain within his dominions. He follows the milk-pails to and from the yard, and if they are left, as they sometimes are, for a few minutes at the gate, he seats himself beside them, but neither touches the contents nor permits anything else to do so, but awaits their removal to the milk-room, when he expects, and always receives his share in a small dish under the shelf, to which he has free access through a small aperture made for his express convenience.

With such a cat it is useless to say we are never troubled with rats or mice. We know nothing of terriers, and care as little. Give us half a dozen such cats as "Timmy," and we would not exchange them for as many of the best terriers in the country. And now, Mr. Editor, if you have not yet seen an honest house cat, one that would not steal cream, butter, cheese or meat, please call at our Woodland Cottage, and we will show you one. C. R. W.

Genesee Co., Mich.

Treatment of Sprains.

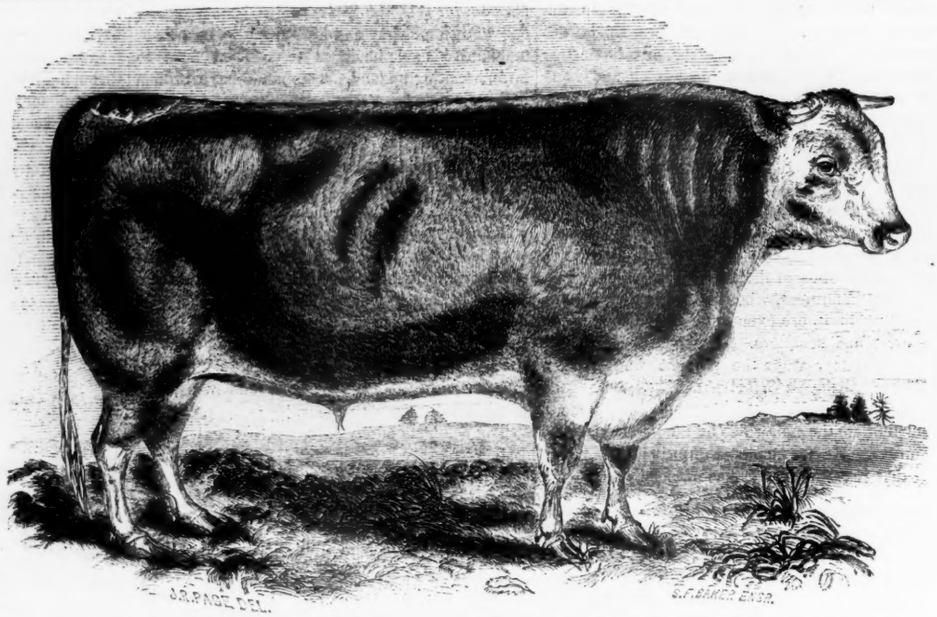
These are very common with both man and beast, and we present the following very good suggestions for their treatment from Dr. Hall's N. Y. Journal of Health—a very valuable work: SPRAINS or *Strains of the Joints* are very painful, and more tedious of recovery than a broken bone. What we call flesh is *muscle;* every muscle tapers down to a kind of string, which we call cord or sinew. The muscle is above the joint, and the sinewy part is below it, or *vice versa*, and the action is much like that of a string over a pulley. When the ankle, for example, is "*sprained*," the cord, tendon, or ligament (all mean the same thing) is torn in part or whole, either in its body, or from its attachment to the bone; and inflammation—that is, a rush of blood to the spot—takes place as instantly as in case of a cut on the finger. Why? For two reasons. Some blood-vessels are ruptured, and very naturally pour out their contents; and second, by an infallible physiological law, an additional supply of blood is sent to the part, to repair the damages, to glue, to make grow together, the torn parts. From this double supply of blood, the parts are overflown, as it were, and push out, causing what we call "*swelling*"—an accumulation of dead blood, so to speak. But dead blood can not repair an injury. Two things, then, are to be done, to get rid of it, and to allow the parts to grow together. But if the finger be cut, it never will heal as long as the wound is pressed apart every half hour, nor will a torn tendon grow together, if it is stretched upon by the ceaseless movement of a joint, therefore, the first and indispensable step, in every case of sprain, *is perfect quietude of the part;* a single bend of the joint will retard what Nature has been hours in mending. It is in this way, that persons with sprained ankles are many months in getting well. In cases of sprain, then, children who can not be kept still, should be kept in bed, and so with many grown persons.

The "*swelling*" can be got rid of in several ways; by a bandage, which, in all cases of sprain should be applied by a skillful physician—otherwise, mortification and loss of limb may result. A bandage thus applied keeps the joint still, keeps an excess of blood from coming to the part, and by its pressure causes an absorption of extra blood or other extraneous matter.

Another mode of getting rid of the swelling is, to let cold water run on the part injured for hours; this carries away the heat, and the more volatile parts of extraneous matters already there; and by cooling the parts, prevents an excess of blood being attracted to the place; so that, in reality, a bandage and a stream of cold water cure sprains in the same manner essentially, by a beautifully acting physiological law. The knowledge of these principles should be treasured up in every mind.

Hereford Cattle.

In our March No., page 76 of this volume, we gave a full description of the Hereford Cattle, illustrating the breed with engravings from Youatt and Martin's work—these being the best we could then obtain. But the more we have looked at those pictures, and compared them with specimens of the animal in this country, the less satisfactory they appear, since they do manifest injustice to the breed as now improved, both in style and appearance. We are glad therefore to be able to present original sketches, taken for this journal from Mr. Corning's excellent Herefords. They are quite life-like and show what the best Herefords now are, in form, substance and value. We get few better engravings of Cattle than the two here given.



IMPORTED HEREFORD BULL "CARDINAL WISEMAN," THE PROPERTY OF E. CORNING, JR., ESQ., ALBANY, N. Y.

Values of Blooded Cattle.

We have been asked to explain why, at some of the late public sales of thorough-bred Cattle and other farm stock, the prices ruled so much lower than a year or two ago, with a fear added, that prices might ultimately get so far down as not only to result in a serious loss to present holders of such stock, but to render it no object to rear them for breeding purposes.

It would be strange, indeed, if such a financial revulsion as we lately passed did not affect the prices of any and everything which, though highly useful, is not very common, and to which partially, at least, fancy values are apt to be attached. That blooded stock of all kinds has not been utterly unsalable, instead of selling at quite tolerable prices, as they have done at the recent public sales, is surprising, and only proves that they have a *positive* value, and that the public still appreciate that value, regardless of money pressure and low prices in most other things. The live stock of a country, once reduced, is slow to come up. The capital invested in them is enormous. They cannot, like the grains and other agricultural crops, be produced in a single year, but are the growth of several years, with food, labor and a very considerable outlay added. They are, therefore, not a temporary, but one of the *permanent* branches of our industry, indispensable to our consumption, and not a luxury that may be put aside without inconvenience, or suffering. The population of the country *must* have meats, as well as bread and clothing, and for so much as they want, the demand is good, always. As to prices, that must depend on the extent of supply. Happily for the stock breeder, and grazier, the country is not overstocked with either Cattle or Sheep. Nor is it soon likely to be. Agriculture, instead of gaining on the other branches of human industry, barely holds its own, and with the new enterprises continually opening to the ambition of our young men, they are drawn off in too great proportional numbers to give agricultural labor or capital a preponderance of supply.

Fine, or improved farm stock, is, among its kind, what improved machinery is in the production of fabrics of any class. A *better* article is produced at a *cheaper* rate. A well-bred Short-Horn, or a Devon bull will beget a calf in a common cow worth, at the lowest estimate, one to two dollars more at six weeks old, for veal, than a common scrub—or ten to fifteen, or even twenty dollars when grown into a bullock for beef. A Southdown or a Cotswold ram crossed upon the common ewe gives the same proportionate value to the lamb, or the wether. So with other improved stock, of whatever kind, excepting some, perhaps, which do not enter into consumptive articles, and are only bred as a thing of taste, or fancy merely. Whatever has intrinsic value will maintain it, in the long run, let temporary causes of depression be what they may. Therefore, we do not regard the lower prices at which blood animals may have been recently sold as affecting at all their permanent breeding value.

We admit, however, that some classes of fancy, or improved stock have been too high in price for purposes of utility *only*. But as in everything where great excellence has been attained, superior quality will command its price. And it is well that it is so. Without that reward, the attainment of marked superiority would be neglected in every thing. Were we a stock-breeder in the better class of animals, we would increase rather than diminish our stock at the present time, to be in readiness to supply the better demand which is sure to come soon.

Swiss Cattle.

To the Editor of the American Agriculturist:

With the July *Agriculturist* I am so well pleased, that I determined, if you will forward a copy of the German edition, to try to collect subscribers from among my German neighbors. Will you, if consistent, give a description, &c., of Swiss cattle, and if introduced would they maintain that superiority as milkers which they possess in their native land?

The Lehigh County Agricultural Exhibition for 1858, will be held at Allentown, September 28th to October 1st. A visit, I think, would amply repay you—for it is only a few hours' ride—to see our large and spacious barns filled to overflowing. The largest stone and the largest iron bridges in the Union are here—only a few miles apart—crossing the Jordan. In one view, you can see the smoke rising from the furnaces manufacturing one-sixth of all the iron made in the United States, and last though not least, an honest and upright German people.

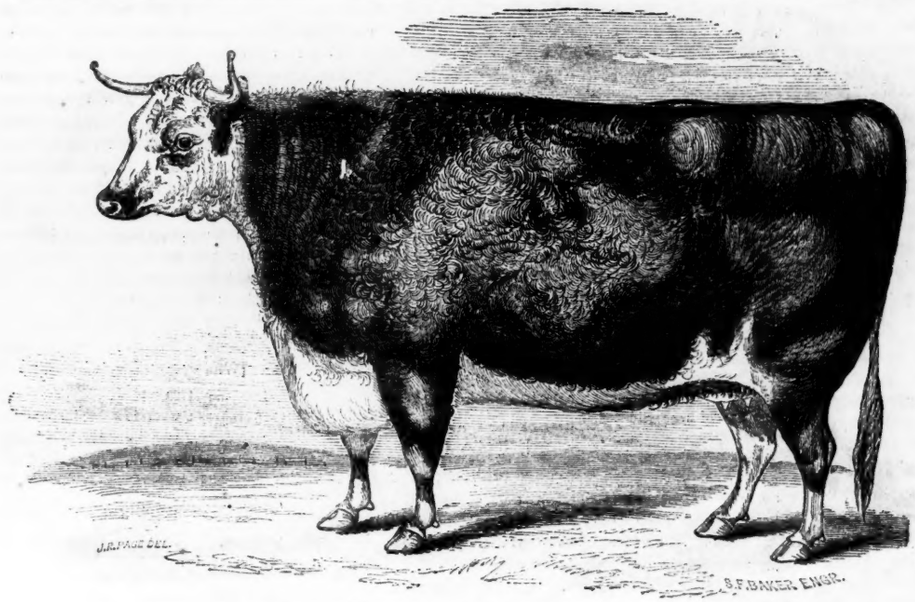
EDWARD KOHLER.

Whitehall Station, Lehigh Co., Pa., Aug. 5, 1850.

REMARKS.—We regret that we cannot give our correspondent a description of Swiss cattle, from personal inspection, rather than from the loose observations made upon them by others, and those not of the most exact kind.

There are, as we learn, two different classes of cows in Switzerland adapted to their different ranges, and climates. In the rich lands, and valleys, are kept a fine, short legged, broad backed race, weighing some ten or twelve hundred pounds, deep milkers, and good in all the requirements of the dairy. As near as we can learn, they are something akin to the Dutch or Holland cattle, which are a sub-variety of Short Horn, excellent milkers, but rather coarse in bone, and mostly black and white in color. Many of the Holland cows were imported into New York, from time to time, many years ago; and, although they exhibited excellent dairy qualities, failed to establish any decided superiority over our good crosses with the Short Horn, Devon, Ayrshire, and Alderney on our best native cows.

The other race of Swiss cows is the mountain breed, or such as are kept through the Summer on the steep mountain sides of the highlands, where a light, agile creature only can crop the herbage on their precipitous sides. They cannot, of course, be deep milkers, but what they do give is rich, and creamy, making excellent butter and cheese. We do not believe that either of the breeds of Swiss cows introduced into the United States would be an improvement, either in themselves, or their crosses, on what we now have in the fine races of English, Scotch, and Channel Island cattle, under the various names of Short-horn, Devon, Hereford, Alderney, Ayrshire, and Galloway, of which we have recently given full accounts and descriptions. These are destined, as we think, to be favorites with our farmers and cattle breeders beyond all others. Removed into



HEREFORD COW "GRACE," THE PROPERTY OF E. CORNING, JR., ESQ., ALBANY, N. Y.

a new country, far away from our native land, we are apt to look back to the days of our childhood, while "distance lends enchantment to the view," and we fancy that many things, which we left behind us, if only in our possession now, as then, would be superior to what we have; but a trial would only convince us that many of them are ill adapted to our new wants and conditions.

Care of the Health of the Horse.

We refer now, not to any special management of horses in particular cases, but to the ordinary, daily care which they require. Were this noble animal properly cared for every day, there would be little need of any special treatment. As it is, horses are continually ailing; it is almost impossible to buy one that is perfectly sound.

In the general management of the horse, it is very important to secure him a plenty of fresh air. Neither man nor beast can enjoy health while inhaling corruption at every breath. And yet, most stables are built with little regard to this important matter. They are low, contracted, close and hot, with scarcely any means of ventilation. The urine and dung are allowed to lie upon the floor mixed with litter, and, fermentation setting in very soon, a pungent and unwholesome gas is emitted which pervades the whole stable. Who has not perceived this on entering a barn, especially in the morning? The heat and odor are sometimes so powerful as almost to stifle one's breath. It is no wonder that horses occupying such stalls, should suffer from inflamed eyes, chronic cough, diseased lungs and glanders. The only surprise is, that they can endure such barbarous treatment, as long as they do, with so great impunity.

Every stable, then, should be well ventilated. The stalls should not be boarded up tight from floor to ceiling, but left open from four to four and-a-half feet upward. There should be some means for introducing fresh air in the neighborhood of the stalls. It should not be through a window blowing directly on the horse, but at some little distance from him. Then, there should be an opening in the roof of the stable through which the foul and heated air can escape. Between this ventilator at the top and the aperture in the lower part of the building, a constant circulation will be kept up; but neither one will work efficiently without the other.

It is generally considered inexpedient to occupy the loft directly over the stalls, with hay. The foul vapors rising night and day mix with the hay and make it unpalatable and unwholesome. Many insist even that the ceiling above the stalls should be plastered. The floor overhead should at least be battened tight to prevent the dropping of seeds and dust upon the hair and into the eyes of the horse. But if this is done, some means should be provided for the free escape from the stall of bad air and the introduction of that which is fresh and wholesome.

One important means of securing good air in stables is to keep them scrupulously clean. Some persons allow dung to accumulate for several days, and many clear it out only once a day. It is absurd to expect pure air where fermentation and putrefaction are going forward. All manure and wet litter should be swept out twice a day, and means should be provided for the passing away of urine. The floor of the stall should have a slight inclination, allowing the water to run off into a gutter; or if any object to this, they should frequently strew their stable floors with saw-dust, tan-bark, or plaster. Dr. Dadd observes: "The bedding which, according to long custom, is stowed under the crib, there acting as a sort of noxious smelling bottle to the horse's nostrils, should be spread out in the open air, and sorted; the refuse and excrements removed to a dung heap located as far from the stable as possible; for the common manure receptacle, under the stable floor, is one of the worst features of stable economy. The stable floor should be washed clean as often as circumstances permit."

Remarks upon "Notes on Honey Bees."

To the Editor of the American Agriculturist:

S. C. Mendenhal, gives some "Notes on the Honey Bees," in the August number of the *Agriculturist*, page 237, that are so out of the usual routine of their doings, that they would seem to require some remarks, even if I were not called upon by name for "explanation." The incidents related are certainly very remarkable, and so many are together that I find myself wishing that I was assured that there was no mistake about it. Assuming that this matter is fact, that the comb of that old "gum" was really 25 years old, (it must have been tough as well as black,) we might expect it to be as described; he concludes the paragraph by asking, "Does not this prove that bees degenerate in size, if old brood combs are used?" and thus intimates, that somebody had said they would not. I have known combs half that age to be used for brood, and the bees bred in them *could not* be distinguished from those reared in new combs! But this does not prove that cells used twenty-five years, are not too small. The cell is at first a little larger than really needed, but each young bee reared, leaving a cocoon, would in time fill it, however large the cell, or thin the lining. But what I contend for is that the cells do not fill up as fast as the interest of the majority of our patent venders leads them to represent, and therefore the renewal of combs, because of the cells becoming too small, is unnecessary, short of eight or ten years.

The writer's next item is in relation to swarms leaving before clustering, and he asks for a "remedy." This happens so seldom with us, that I had not thought of it. Since writing the work on bees in 1853, I have had five years further experience, making the whole time thirty years; and during this time, such an occurrence has never happened with me, although the chances have been somewhat numerous. As for a remedy for those who are losers in this way; I would say that it has been remarked that "*very good attention* to the bees would lead them to *expect* a tenement to be provided when needed, and they would take no pains to look up one." I would at least recommend this *attention*, as something likely to pay in several ways—it is an important item in bee keeping.

The last item relative to the piping of the queen, is still more unusual. My printed remarks on that part are fully confirmed by subsequent experience. On the average, the queen will not commence piping in more than one stock in fifty, before the first swarm. That they should do so in two out of three of Mr. Ms. neighbor's, is quite possible; but I suspect there has been some mistake. Mr. M. further says, "In a swarm that has been out four days, I last evening heard the queen *piping* when I was twenty feet from the hive." This is a circumstance so *very extraordinary* (piping in a new swarm) that I would like to inquire as to the position of said swarm relative to the old stocks, whether near or otherwise; whether at the distance of 20 feet, it was not *possible* for the piping (heard at that distance) to proceed from one of the old stocks, the one for instance, that had sent out said four-days-old-swarm; it seems that two of three were piping before the *first* swarm.

If these things can be substantiated as facts, (leaving no chance to doubt,) they are worthy of notice, as forming exceptions to general rules.

St. Johnsville, N. Y. M. QUINBY.

Should Drones be Killed?

Mr. J. K., of Bedford Co., Pa., asks:—"What think you of the practice of killing the *drones* in the bee hive? They are very numerous at this time of the year, and consume much honey. Will their destruction injure the swarm?" We submitted the above questions to Mr. Quinby, to which he replies as follows:

It is now admitted that the drones are the males among bees. Nature has so arranged it, that sexual intercourse takes place in the air. The excursions made by the queen for that purpose, are attended with much peril. To prevent failures as much as possible, a large number of males (drones) are provided, and multitudes of them are on the wing soon after the middle of each fair day. Nature provided drones enough for isolated colonies. When several hives, or stocks are brought together, the instinct that reared drones enough for one, is retained, and each colony provides the usual number, while one or two stocks might produce nearly enough. When a great number of stocks are in company, the chances of the queen being lost by entering the wrong hive after her excursion are greatly multiplied; perhaps a few more drones than one or two colonies would produce might be expedient to make her success as certain as possible. Yet when a large number of stocks are together, a majority of the drones may be destroyed to advantage, and thus save all the honey they would consume. Unless the workers are very much reduced, the drones can be of no use a few weeks after swarming is over. A better way, where one has the moveable frames, would be to remove nearly all of the drone cells in the Spring, and substitute worker cells instead, thereby preventing the rearing of the drones.

Bees and Bee Culture.

A LIST OF THE BOOKS ON THIS SUBJECT IN THE ENGLISH LANGUAGE.

We present below an exceedingly valuable and interesting list of more than *Sixty volumes* printed in the English language, since A. D. 1600, *devoted wholly or chiefly to the Culture of the* HONEY BEE. This catalogue, prepared with great care and labor expressly for the *Agriculturist*, by our well known correspondent E. W. G., is the only one of the kind, at least in this country, so far as we know; and apart from its interest to the general reader, will be a great convenience to those specially engaged in inquiries concerning the habits and instincts of bees. At some future time, we may comment upon the history suggested by this catalogue, which we leave now to speak for itself. It does not include works on Entomology in general, or special treatises in Cyclopedias and Scientific Journals. Though some of the more recent British publications are omitted, it is as complete and accurate as we have the means of making it; but if our readers discover the omission of any titles, which it is in their power to supply, we beg them to inform us. In a few cases we have given the titles at unusual length, as an indication of the character of the works.

Butler, (Charles). Oxford: 1609 8vo.
[2d Edition, London: 1623. 4to.]
THE FEMININE MONARCHIE: or the Historie of Bees, and the right Ordering of them.

Levett, (John). London: 1630. 8vo
THE ORDERING OF BEES.

Remnant, (Richard). London: 1637 4to.
HISTORY OF BEES.

Hartlib, (Samuel). London: 1655. 4to.
THE REFORMED COMMONWEALTH OF BEES

Purchas, (Rev. Samuel). London: 1657. 4to.
A THEATER OF POLITICAL FLYING INSECTS: wherein especially the Nature, the Worth, the Work, the Wonder and the manner of Right-Ordering of the BEE is Discovered and Described. Together with Discourses Historical, and Observations Physical, concerning them.

Gedde, (John). London: 1675. 8vo.
METHOD OF BEEHOUSES AND COLONIES.

Warder, (Joseph). London: 1676. (With plates.) 8vo.
APIARIUM, OR A DISCOURSE OF BEES: tending to the best way of improving them and to the fallacies that are imposed by some for private lucre on the credulous lovers and admirers of these insects.

——— London: 1680. 8vo., with plates.
A FURTHER DISCOVERY OF BEES.

Worlidge, (John). London: 1691. 12mo.
APIARIUM: or a Discourse of the Government and Ordering of Bees with their nature and properties.

Southerne, (Edmund). London: 1693. 4to.
A TREATISE CONCERNING THE RIGHT USE AND ORDERING OF BEES: Newlie made and set forth according to the Author's own Experience: which by any heretofore hath not been done.

Warder, (Joseph). London: 1712. 18mo. pp. 166.
[Ninth Edition. London: 1765.]
THE TRUE AMAZONS; or, The Monarchy of Bees: Being a new discovery and improvement of those wonderful creatures. [With directions "plain and easy how to manage them both in Straw hives and transparent boxes; so that with laying out of but four or five Pounds, in three or four years, if the Summers are kind, you may get thirty or forty Pounds *per annum*."]

Gedde, (John). London: 1721. 8vo.
THE ENGLISH APIARY: or Complete Bee Master.

Beaumur, (R. A. F.). London: 1744. 8vo.
12 Copper plates. pp. 468.
THE NATURAL HISTORY OF BEES: containing an account of their production, their economy, the manner of their making wax and honey, and the best methods for the improvement and preservation of them. Translated from the French [by N. Bazin].

Thorley, (Rev. John). London: 1744. 8vo. Copper plates. pp. 208. [Second Edition, 8vo. 1765].
MELISSELOGIA: or, The Female Monarchy: Being an enquiry into the nature, order and government of Bees, those admirable, instructive and useful insects. With a new, easy and effectual method to preserve them, not only in colonies, but common hives, from that cruel death to which their ignorant, injurious and most ingrateful owners so commonly condemn them. A secret unknown to past ages, and now published for the benefit of mankind. Written upon forty years observation and experience.

White, (Stephen). London: 1756. 8vo.
COLLATERAL BEE BOXES: or a new, easy and advantageous method of managing Bees, in which part of the honey is taken away in an easy manner, without destroying or much disturbing the Bees; early swarms, if desired, are encouraged, and late ones prevented.

Swammerdam, (John, M. D.). London: 1758.
THE BOOK OF NATURE: or, The History of Insects. Translated from the Dutch and Latin, by Thomas Floyd. [Seventy-eight pages of this elaborate folio, and ten copper plate engravings are given to "A Treatise of Bees; or, an accurate description of their origin, generation, sex, economy, labors and use."]

Mills, (John, F. R. S.). London: 1766, 8vo. pp. 168.
AN ESSAY ON THE MANAGEMENT OF BEES: wherein is shown * * * that the practice of saving their lives when their honey and wax are taken from them was known to the Antients, and is, in itself, simple and easily executed.

Wildman, (Thomas). London: 1768. 4to. pp. 176.
[Second Edition. 1779]. Copper plates.
A TREATISE ON THE MANAGEMENT OF BEES: wherein is contained the Natural History of those Insects; with the various methods of cultivating them, both antient and modern, and the improved treatment of them.

White, (William). London: 1771. 8vo.
COMPLETE GUIDE TO THE MYSTERY AND MANAGEMENT OF BEES.

Debraw, (John). London: 1777. 8vo.
DISCOVERIES ON THE SEX OF BEES: explaining the manner in which their species is propagated; with an account of the utilities that may be derived from these discoveries by their application to practice.

Keys, (John). London: 1780. 8vo.
THE PRACTICAL BEE-MASTER: in which is shewn how to manage Bees, either in Straw hives, or in boxes, without destroying them, and with more ease, safety and profit than by any method hitherto made public. [With strictures on Wildman's treatise.]

Bromwich, (Bryan J.). 1783. 8vo.
THE EXPERIENCED BEEKEEPER: an essay on the management of Bees.

Bonner, (James). London: 1795. 8vo.
PLAN FOR SPEEDILY INCREASING THE NUMBER OF BEEHIVES IN SCOTLAND.

Keys, (John). London: 1796. Plates. pp. 272.]
THE ANCIENT BEE-MASTER'S FAREWELL; or, Full and plain directions for the management of Bees to the greatest advantage; declaring further improvements, &c., &c. [With strictures on Bonner].

Isaac, (John). London: 1799. 12mo.
THE GENERAL APIARIAN; wherein a simple, humane and advantageous method of obtaining the produce of the bees, without destroying them, is pointed out.

Anonymous. London: 1800. 8vo.
COMFORT TO ARISTEUS: or a few useful hints on the management of Bees, so as to render honey and wax a cheap and plentiful commodity, &c., &c

Huber, (Francis). London: 1806. 12mo.
NEW OBSERVATIONS ON THE HISTORY OF BEES; translated from the French.

Keys, (John). London, 1814. 12mo. pp. 272
A TREATISE on the breeding and management of Bees to the greatest advantage. [This seems to be simply a reprint of "The Ancient Bee Master's Farewell."]

Huish, (Robert). London: 1815. 8vo. Plates. pp. 395.
[New edition, greatly enlarged. 1844. pp. 458.]
A TREATISE ON THE NATURE, economy and practical management of Bees, in which the various systems of Apiarians are examined, &c.

Bevan, (Edward). London: 1827. 12mo. Plates. pp. 404. [New Edition, xtended and revised, 1838].
THE HONEY BEE: its Natural History, Physiology and Management

Thacher, (James, M. D.). Boston: 1829. 12mo. pp. 164.
A PRACTICAL TREATISE on the Management of Bees: with the best method of destroying and preventing the depredations of the bee-moth.

Smith, (Jerome V. C., M. D.) Boston: 1831. 18mo. pp. 106.
AN ESSAY ON THE PRACTICABILITY of cultivating the Honey Bee in maritime towns and cities.

Payne, (J. H.). London: 1833. 12mo. pp. 71.
THE APIARIAN'S GUIDE.

Bagster, (Samuel, Jr.). London: 1834. 12mo. Forty wood cuts. pp. 244.
THE MANAGEMENT OF BEES: with a description of the "Ladies' Safety Hive."

Kelsey, (Francis). New-York: 1835 12mo. pp 24.
A PRACTICAL TREATISE ON THE MANAGEMENT OF HONEY BEES.

Nutt, (Thomas). 3d Edition. Wisbech: 1835. 12mo. pp. 269. Sixth edition. London: 1846. pp. 340.
HUMANITY TO HONEY BEES: or, Practical Directions for the management of honey Bees upon an improved and humane plan, by which the lives of bees may be preserved, &c.

Smith, (Richard). 1839. 12mo.
THE COTTAGER'S BEE BOOK.

Weeks, (John M.). New and enlarged Edition. Boston: 1840. 18mo. pp. 128.
A MANUAL: or an Easy Method of Managing Bees, with infallible rules to prevent their destruction by the moth.

Hall, (William M.). New-Haven: 1840. pp. 48.
THE APIARIAN: or a Practical Treatise, &c

Duncan, (James). Edinburgh: 1840.
THE NATURAL HISTORY OF BEES.

Wighton, (J.). London. 1842. 12mo.
HISTORY AND MANAGEMENT OF BEES.

Cotton, (W. C.) London: 1842. 8vo. Plates.
MY BEE BOOK.

——— London: 1843. 12mo.
TWO LETTERS ON BEES.

Milton, (J.) 1843. 8vo.
PRACTICAL BEE KEEPER

Dunbar, (W.). Edinburgh: 1843. 12mo. BEES.

Allen, (Thomas R). Syracuse: 1846. pp. 57.
BEE CULTIVATOR.

Taylor, (H). Third edition: 1846. 12mo.
BEE-KEEPER'S MANUAL.

Munn, (W. A.) 8vo.
BARB AND FRAME BEEHIVE described.

Chalinski. 12mo.
BEEKEEPER'S MANUAL.

Scudamore, (E.) Second edition. London: 1846. 12mo. pp. 53.
ARTIFICIAL SWARMING OF BEES.

Townley, (Edw.). New York: 1848. 18mo. pp. 162.
PRACTICAL TREATISE on Humanity to Honey Bees.

Anonymous. London: 1848. 24mo.
HANDBOOK on the Honey Bee.

Miner, (T. B.) New-York: 1849. 12mo. pp. 349.
THE AMERICAN Bee-keeper's Manual. (Wood cuts.)

——— Clinton: 1851. 12mo. pp. 24.
AN ESSAY on the Winter Management of Bees.

Anonymous. Philadelphia, 1851. 18mo. pp. 126.
THE HIVE AND ITS WONDERS. (Written for the American Sunday School Union.)

———. New-York: 1851. 12mo. pp. 119.
THE COTTAGE BEE-KEEPER. By a Country Curate.

Richardson, (H. D.) New-York: 1852. 12mo. pp. 72.
THE HIVE AND THE HONEY BEE. (With wood cuts.)

Anonymous. London: 1852. 8vo.
THE HONEY BEE: (reprint from the Quart. Review).

Langstroth, (Rev. L. L.) Northampton: 1853. 12mo. pp. 384. Second edition, with wood cuts, New-York: 1857. pp. 534).
THE HIVE AND THE HONEY BEE.

Quinby, (M.) New York: 1853. 12mo. pp. 376.
MYSTERIES of Bee Keeping Explained; being a complete analysis of the whole subject.

Wood, (Rev. J. G.) London: 1853. 12mo. pp. 114.
BEES: Their Habits, Management and Treatment. (With illustrations).

Eddy, (Henry, M.D.) Boston: 1854. 12mo. pp. 60.
EDDY ON BEE CULTURE, and the Protective Bee-hive.

Phelps, (E. W.) New-York: 1855. 12mo. pp. 96.
THE BEE-KEEPER'S CHART.

Lardner, (Dionysius, D. C. L.) London: 1856. 12mo. 112 pages on Bees.
THE BEE AND WHITE ANTS; their manners and habits: with illustrations of animal instinct and intelligence. [From the Museum of Science and Art, with 135 illustrations.]

Two Blades of Grass vs. One.

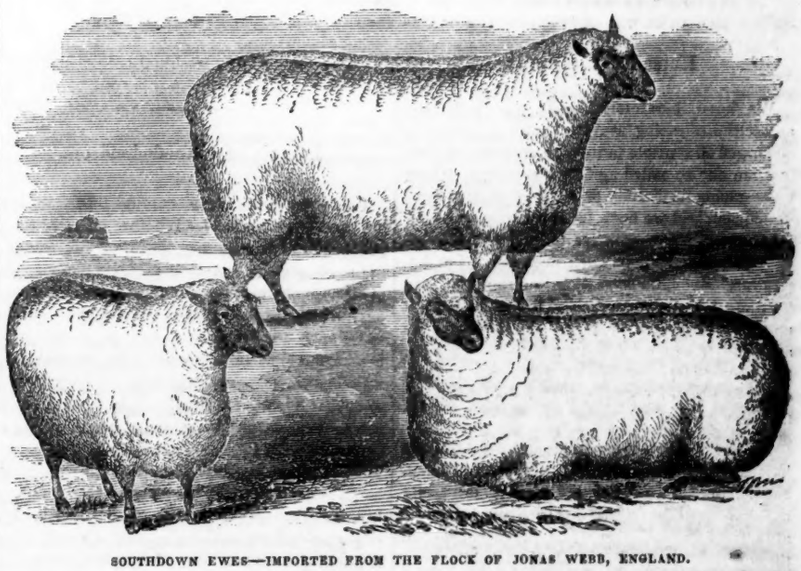
We are not able to say how many addresses, reports, and communications we have had sent to us during the year, which contain the proposition, that that man is said to be a benefactor, who causes two blades of grass to grow where one grew before. We are safe in saying that it is some scores at least. As a rule, we stop when we come to that sentence, and conclude, that the man who wrote it had not much to say. We do not doubt the sentiment any more than we doubt the historical fact, introduced into every school boy's composition upon intemperance, that Alexander killed his friend Clytus in a drunken spree. We concede the benevolence of the man who multiplies blades of grass, whether once, twice, or sixty fold for all time to come, and we wish to advertise all our friends, who write addresses for the Fall fairs, or articles for the papers, that we are not heretical on this point, and never mean to be. Our readers generally are sound in the faith, and are stirring themselves diligently to intensify the prolific qualities of grass. While all flesh is grass, there is little danger that the verdancy and the truth of this proposition will be forgotten. We beg for our own particular benefit, and that of our readers, that this sentiment may be laid upon the shelf among the fixed facts, and axioms of our agricultural literature. He is a benefactor who makes the sun to shine. We believe this truth just as cordially, as if it was announced in every chapter of the Bible, and bored into us in every sermon on Sunday. The whole world has been convinced for at least two thousand years past, of the benevolence of the man who makes the grass reduplicate its blades. For a small sum we will warrant that the proposition shall not be doubted for the next two thousand years of the world's history, even if no writer alludes to it in any way, shape or manner.

The Southdown Sheep.

Many of our readers are already aware that of the improved breeds of mutton sheep which have been brought into this country from England, we have esteemed the Southdowns as among the very best. Their compact, well-knitted frames, their hardihood, their capacity of taking on flesh at an early age, and their fair fleece of middle-quality wool give them a value to the smaller farmers. They are so available for flesh and ready market, that they are rapidly spreading throughout the country wherever feeding mutton, or rearing market lambs is an object, and railroad transportation is accessible. Thoroughbred Southdowns are, as yet, too valuable as breeders, to sacrifice in mutton; and there is not a likely thoroughbred ram reared, but is worth at least fifty dollars as a lamb-getter, among a flock of common or cross-bred ewes, kept mainly for mutton purposes. As a proof of this fact, one need only stand at our sheep and lamb markets on sale days, to witness the wide range in price which our butchers make in their purchases of good Southdown and long wooled grades, over the common scrubby things so framed that they cannot take on a fair carcase of mutton under almost any given amount of feeding. On the same food, the improved sheep is fat, and plump; the other is lean and scraggy. One brings a profitable return to the breeder, and a fair profit to the purchaser; the other, no profitable return to the breeder, and if the buyer or butcher makes a profit on the carcase, *his* profit comes out of the *consumer*, who is surely a loser in the use of such inferior meats.

We are led to these remarks by receiving from Mr. J. C. Taylor, of Holmdel, Monmouth Co., New Jersey, a sketch of three of his beautiful imported Southdown ewes, bred by Mr. Webb, the celebrated Southdown breeder, at Babraham, Cambridgeshire, Eng. In these cuts are exhibited the fine rotund shape, and beautiful symmetry of the animal as now perfected by their best breeders, both in England and America. Mr. Taylor has taken eminent pains, and been at great expense, to get up a flock of the choicest variety, and from his success in making sales, both at home and abroad, he is doing signal service to the country. A late sale of eight rams, and two ewes to go to California, at an average price of $110 each, fully justifies his enterprize, while it repays the extraordinary outlay in stocking his farm with such valuable sheep. From $300, for some of the choicest, down to $50, for others of equally good blood, but younger, were among the prices; and we have no doubt that the discriminating sheep-breeders of our country will continue to buy, at fair prices, all the good Southdowns which our breeders can rear for years to come. Mr. Taylor recently imported, at the cost in England of $500 paid to Mr. Webb, a fine Southdown ram, "Frank," the highest price ever before paid, except by our friend Samuel Thorne for his celebrated prize ram, No. 112, three or four years ago, also from Mr. Webb, which cost in England, $650, the price at about which he had been *let* at for a single season, at the time, but bought off by Mr. Thorne from the bidder. There are probably at this moment no better Southdowns in England than those now in the possession of Mr. Thorne, and Mr. Taylor, and we congratulate the country that we have amongst us two gentlemen who have exhibited the sagacity and enterprise to thus introduce and establish at once, without regard to cost, the highest standards of quality in this race of sheep.

We are surprised and mortified that the stock farmers of our great feeding districts in the West have hitherto paid so little attention to these valuable sheep. It would cost them but twenty-five per cent. more to bring a sheep to New York worth six to ten dollars at the Bull's Head, than the scraggy thing which only brings three or four dollars; and yet they do it, while the *tools* to revolutionize the whole mutton trade of the country can be obtained for a small percentage on the difference in price of the mutton, when reared. In addition to the extraordinary sheep of Messrs. Taylor and Thorne, some fine flocks of Southdowns exist in the western part of New York, in Ohio, and some other States, from which they can obtain rams to improve their flocks of mutton.



SOUTHDOWN EWES—IMPORTED FROM THE FLOCK OF JONAS WEBB, ENGLAND.

ENGRAVED FOR THE AGRICULTURIST, AND DEDICATED TO THE MANAGERS OF CERTAIN SO-CALLED "AGRICULTURAL FAIRS."

Horse Races at Fairs.

We have heretofore borne our testimony against horse-racing at Agricultural Exhibitions, and urged all sensible farmers to stay away entirely from any so-called agricultural fairs, where horse-racing is directly or indirectly encouraged or allowed; and we have, likewise, been so ungallant as to advise the ladies to make no display of equestrian skill on such occasions. Let Agricultural Exhibitions be such, and such only, and let those who delight specially in fast horses get up their own shows or races. If, however, the advocates of racing insist on showing off their fast horses at the Fairs, we commend to their consideration the following hints from the Springfield Republican:

At every Show there are a class of beautiful horses, of moderate abilities. Like some handsome humans we have read of, they are pretty but not smart. We have a plan to display these at the coming Fair, of course with the consent of the owners. It is said that the inhabitants of Minorca have the following amusement on their list, viz., *a donkey race*, in which there may be from twelve to twenty competitors. The rules of the race are, that no owner shall ride his own animal; that no one who starts shall turn back, or stop; and that the last one at the goal shall be considered the winner. Of course, it is for the interest of every aspirant for the prize to urge on the donkey on which he rides, so as to keep ahead of his own, ridden by another. It must be a very comical and ludicrous sport, and being a very unusual thing, we throw it out as worthy the attention of the horse-committees at the approaching Fairs.

Laurels and Rhododendrons.

Can anything be more beautiful than these native evergreen shrubs? Whether *we* prize them or not, our cousins across the water do, esteeming a collection of "American plants" among the choicest embellishments of their lawns. American taste runs too much after foreign trees, shrubs and plants. Anything from England or Scotland, is very fine; whatever comes from Austria is a little better; from northern Asia, or from China, or Japan, it is superb; and if it is tender, difficult to manage, and withal quite costly, it is unsurpassable!

Would it not be better for us to be more eclectic?—first, collect whatever is truly valuable at home, then obtain those of real worth elsewhere; despising nothing because it is native and familiar, and running after nothing simply because it is foreign and strange.

Many persons refrain from attempting to cultivate the laurel, holly, and rhododendron, because they suppose that great pains must be taken in selecting a suitable aspect for them, in making an artificial soil, in watering and mulching in Summer, and in protecting them in Winter. And they have been told that many persons who try to cultivate them, soon lose them, and that in no case do they thrive as well as in their native habitats. Let nature, they say, raise her own laurels and hollies, and we'll raise hollyhocks and lilacs.

We have read of an amateur, who, having failed with these plants in the common soil of his garden, tried a peaty earth from the side of a ravine, with perfect success. He considered the lime which is found in most soils, to be poisonous to the roots of these shrubs. The earth on the sides of ravines, he thought, was leached pure of all lime, by the rain which had filtered through it for many years. Though his theory was probably incorrect, his practice was eminently successful. We throw out the hint here for the benefit of any who may have been discouraged in their first attempts with this tribe of plants.

From our own experiments, we are satisfied that these plants may be grown well, if the following rules are attended to, viz:

For the laurel and rhododendron, prepare a bed by excavating the soil eighteen inches or two feet deep. Then fill up the cavity with a mixture in about equal parts of good garden soil, muck from the woods, and sand. This *depth* of soil is needful, because these plants require constant moisture at the roots; and this can be obtained better by having underneath them a deep, finely pulverized soil, than by constant watering. This *quality* of soil is needful, because it better suits the constitution of the plants, than does stiff clay or rich loam.

In planting them, do not bury the roots deep, but rather set them near the top of the soil, spreading out the fibrous roots, and covering them with an inch or too of earth. After planting, give them a good sprinkling with rain water, and then mulch the whole surface of the bed with forest-leaves, two or three inches in thickness, fastening them down with small flat stones. In preparing the bed—we should have added before—do not fill up the excavation quite to the surface. but leave a depression below the surrounding ground, of two or three inches. This is important, to catch the rains from the neighboring surface, and to allow of a good thick deposit of leaves for mulching. This mulching is very useful in Summer to retain moisture, useful in Winter as protection to the roots from hard frosts, and useful all the year round, in affording nutriment to the plants.

But there is another thing as important as the above: and that is, *shelter from the sun*. Those plants are found wild mostly in the shade; they succeed best in such situations. For a single row of plants, it may answer to make a bed on the north side of a high, board fence. But for an oval or circular bed, containing a good collection, some wider spreading shade will be necessary. The north side of a house will answer, if the bed is

also sheltered from harsh north and west winds. Or a bed shielded by evergreens on all sides will do well. The shade of deciduous trees is not sufficient, because it is so meager in Winter. A bed in our own grounds, so prepared and sheltered by evergreens, has succeeded the past year, as well as could have been desired. Our little collection of laurels and rhododendrons is helped out by a few azaleas, mahonias, boxwood, prinos glabra (Inkberry), &c.

Raising Chestnuts.

When ornament and utility combine in a shade-tree, it deserves universal recommendation. This is the case with the chestnut. Its fruit is desirable, its timber is valuable, and its form and foliage are pleasing to the eye. The tree is also of rapid growth.

Many persons, however, fail in their attempts to germinate the seed. Their failure is owing, doubtless, to their allowing the nuts to become dry before planting. A few days' exposure to the sun and air, is sufficient to shrivel the germ beyond recovery. The only sure way of growing them, is to plant them as soon as they are gathered from the tree, or at least to cover them with moist sand until the ground is prepared for planting. In planting, cover them an inch and a-half deep, if the soil is heavy; or two inches if it is sandy. Some recommend to follow nature a little more closely, and to bury the seed only about an inch, and then to spread over the surface a coat of rotten leaves, to keep the ground moist and soft.

Degeneration in Cultivated Plants.

To the Editor of the American Agriculturist:

It is a well-known fact that some varieties of seeds, when raised for a long time upon the same soil, fail in their productive properties, or as the farmer says, "have run out," and need changing. Hence the recommendation frequently given, to obtain new seed from a distance. Let us examine the theory for a moment.

Plants, in regard to their procreative qualities, are of two kinds, one containing generative virtues within itself, and the other requiring to be fertilized or impregnated with a substance from another plant of its kind. It is easily shown that a plant of the latter class, when grown by itself, or guarded against any connection with another of its species, loses its reproducing powers.

The analogy between the vegetable and animal kingdom is here sought to be established, where a violation of the laws of physiology, or of Nature, is as ruinous to one as to the other. Every man engaged in stock raising knows the ill effects of breeding in, and I think every one interested in vegetable culture should equally guard against violating the same laws. By constantly sowing the same seed we generate from kindred relations, which it is but natural to suppose will tend to degeneracy. I think the proper plan is to procure a portion of the seed from abroad, and mix with the home grown, or better still, procure it from two distant and opposite localities, mixing before it is sown, or planted. D. M. N.

Caledonia, N. Y.

Somebody says: He who marries for beauty only, is like a buyer of cheap furniture—the varnish that caught the eye will not endure the fireside blaze.

The Orchard....IX.

THE QUINCE.

This is a valuable and much esteemed fruit throughout all the United States. Like the pear, however, it is capricious in its choice of soils, climate, and position. In places suitable to its habits and growth, it thrives, and yields its fruit in regularity and profusion. In places unsuitable, it is refractory, and, if growing at all, is short lived at the best, and yields, fitfully, but imperfect and inferior fruit. Much, however, in this last respect, may depend on cultivation, and deficiencies of soil, climate, and position, and may be partially overcome by extraordinary care, in which no specific directions can always be given, but only thoroughly ascertained by the cultivator through a course of experimental treatment to a successful result.

SOIL CLIMATE AND POSITION.

A warm, rich, deep, gravelly loam, or a heavy, rich, clayey loam, resting on a *dry* bottom, are, perhaps, equally congenial to the perfect growth of the wood, and the perfection of its fruit — in either case, the soil having a good drainage. The best cultivation should be given by keeping the earth free, mellow, and rich with ordinary manures, and occasional lime, ashes, salt, and bone earth, when such elements are absent in the natural soil.

As to climate, probably 40° North to 43°, is its favorite locality in the United States, although various localities, both north and south of the degrees named may be found quite as congenial.

In position, the quince delights in a warm, sheltered spot. It loves the sunny nook of a garden, or a place near the kitchen door where it can receive a portion of the wash of the house, or a sunny declivity passing off from the barn-yard. We have known wonderful trees, both in growth and bearing, so situated, showing, that although it may flourish in the open orchard, it loves to nestle in a rich corner, and puts forth its greatest feats of production in the most favored localities. It delights in the bank of a small, quiet stream, high above its floods, dry shod, yet attainable of moisture when needed. Still it is not imperative in its demands of all these. It will thrive, when it thrives at all, in any ordinary soil, and on any good fruit site, with fair cultivation. Its root is closely fibrous, as its top is compact, and therefore it draws heavily on the nutritious quality of the soil around it, requiring frequent applications of manure, and occasional trimming, or thinning of its top. Its *natural* growth is shrubby, or that of pushing several branches from near the ground, which can only be counteracted by close pruning in giving it but a single stem — the best form, on the whole — but with a low head, not reaching more than twelve or fifteen feet in height to its topmost branches.

PLANTING.

Sixteen to twenty feet apart, according to soil and position is the proper distance at which to set them in the orchard, or, if in a single row they may be twelve feet distant only. In any case, separate trees should never intermingle their branches as they require abundance of sun and air to develop their wood and fruit. Large holes, well mixed earth, thorough planting, and good cultivation, as in other choice fruits, are the only treatment under which a *profitable* quince tree, or orchard can be obtained; and with these, and a genial locality, under otherwise favorable circumstances, the culture of the quince can usually be successful.

VARIETIES.

Although several different varieties are named in the nursery catalogues, the orange, or apple is the only one which we can recommend for a sure crop, and a profitable yield. It is, too, the best for preserves, and marmalades, the chief uses to which its fruit is devoted. There are larger, and perhaps more vigorous growths of wood in some varieties, as the Pear quince, Portugal, and Angers; but the fruit is harsh and unflavored, compared with the orange, and we would not recommend them for household, and market purposes. The orange is, withal, a constant bearer, and reliable in all ordinary fruit seasons, and being the latest of all *tree* fruits to bloom in Spring, rarely fails in a crop.

ITS DIFFICULTIES

These arise chiefly from the borer — that pestilent, persevering insect which infests our apple trees. We have seen trees, which gave an annual yield for the past twenty years paying an interest on fifty dollars each, which in three years were cut down with the borer. Many people suppose, and so write it in the books and papers, that a wire, or knitting needle pushed in after it has commenced its ravages will kill it; or that cutting into its sinuous course beneath the bark, and into the vigorous sap wood just beneath where its ravages chiefly lie will do the business; but an examination of its tortuous course after having entered through the bark will show that the wire often punches at nothing but unoccupied wood, and leaves the worm untouched, while the knife, in cutting after its prey, destroys nearly as much more, bark and wood, as the wretch itself has done in its work of destruction.

In short, we have no sovereign specific for this terrible pest, although very good suggestions are made in the July and August *Agriculturist*. We do not say the creature cannot be extirpated, but we have thus far been so unfortunate as to find no sure and infallible preventive of its ravages.

Another formidable, but altogether different enemy, within the last three years, has been the absolute killing of the quince, body and branch, by the severity of the Winters, particularly those of 1855-'6, and 1856-'7 in northern latitudes. Thousands of the finest old trees, for many previous years in full bearing, fell martyrs, apparently, to the severe frosts of those extraordinary Winters. These, however, may be considered only as casualties, and should not deter our pomologists from their efforts at quince cultivation, and such severe action of the elements may not again occur in a lifetime. We have, however, witnessed a successful effort in quince culture, so successful in itself, that, without recommending it on so frail an experiment as the single trial which has come under our notice, we will proceed to mention it for what it may be worth, and recommend its trial by others who from defects in either soil, climate, locality, or the ravages of insects, may have been unsuccessful in their efforts. It is

GRAFTING THE QUINCE ON THE NATIVE THORN.

There is now living, and in successful bearing, an orchard of some scores of quinces, which more than thirty years ago were grafted into the branches, three, four, or five feet above the ground, of native thorn trees growing on a piece of rocky limestone soil, near the shores of Lake Erie. On those branches, young and vigorous, growing up wild and promiscuous as nature planted them, the grafts were inserted, and without any particular cultivation beyond what was given to the various grain and grass crops annually taken from the land on which they stood, we

have seen beautiful crops of fruit of the orange variety, The thorn, as we all know, is a small, compact grained wood, about the size of the quince at full maturity. It is wonderfully hardy, growing pertinaciously against the roughest treatment, and oftentimes an obstinate pest in pasture grounds. Yet, it takes kindly to the quince, and we have rarely seen finer crops of the quince than have grown on these scattered, and much neglected thorns.

In trying this plan we would take wild and thrifty young trees from the outskirts of woods, or pastures, in the Fall or early Spring, with as large balls of earth around them as we could obtain and plant them properly in rich, mellow earth, pruning them down in due proportion with their roots, and having given them a growth of one or two years as their thrift should govern, insert the quince grafts, which, growing, we would take off all the thorn wood and give the whole growth thereafter to the quince. The root of the thorn is widely different from that of the quince, being spreading, and stretching far out in the soil, while that of the quince is close, and fibrous. Otherwise, in wood and top, they grow much alike. Few insects injure either the root, or wood of the thorn, and so far as our observation occurs, no extreme of either cold or heat has affected it.

Our readers will receive the above opinion, based upon *one* successful experiment only, as suggestive, and not in any way as recommending it for *extensive* trial, or the outlay of any considerable capital, or labor in its execution, until successfully proved. We know the quince to be a valuable household and market fruit; and wherever it succeeds is exceedingly profitable to the orchardist, and, consequently, worthy of some pains in its cultivation.

Cider Making—Treatment of the Pomace.

The cider season — what there is of it for this year — will soon be round, and we have a word to say about its manufacture. We are not particular as to what kind of cider mill our friends may prefer to use, whether it be the old fashioned cog, or grooved wooden mill; the grater, of different varieties; or the Hickok, and other recent patents. Any mill which will thoroughly *mash* the apples into a fine, pulpy pomace, is good; but to make good cider, having the full, well matured juice of the fruit in it, giving it *body*, and keeping quality, it is indispensable to have a vat sufficiently large to hold the pulp as it comes from the mill, and keep it for *at least* forty-eight hours.

Pomace fresh from the mill is green in color, and crude, weak, and watery in consistence. To give it the proper quality for *good* cider, after grinding let it lie in the open vat in the *pure* open air turning it over with a wooden shovel thoroughly twice a day for two days, any way, and three, or four, if cool weather, that every part of it may be well exposed to the atmosphere, and imbibe its oxygen, which sweetens, ripens, and colors it. Then lay it up, leisurely, and before the screw is applied to the cheese, let it run all that it will. Apply the screw, gently at first, so that only a small stream will run, increasing the pressure as the running diminishes. By this process you obtain a heavy *must*, rich in its saccharine, and vinous qualities, and when properly strained off a *perfect* article for boiling down with sauces, for the table, and for vinegar. One gallon is worth two of the crude apple-juice — not cider — run rapidly through the mill, and then pressed out in a hurry an hour afterwards. We gave full directions for keeping cider, for selecting apples, &c., in our January number, on page 22 of the present volume, and refer to that for further instruction.

How to Make Good Cider.

To the Editor of the American Agriculturist:

There is hardly a tithe of cider made now as compared with forty years ago. Many of the old orchards have died out, and the temperance reform has prevented their renewal. The market for fine fruits has greatly expanded, and nearly all the trees now planted are for the production of market apples. It took eight bushels of apples to make a barrel of cider, and the barrel sold for only a dollar. Apples now bring every year from fifty cents to a dollar a bushel. Fruit growers can hardly be expected to lament the change that is so much for their pecuniary interest.

Yet cider is still made all over the country in small quantities, some for the apple butter, some for vinegar, and still more for a beverage. When bottled and properly handled, it is as palatable, and much more wholesome, than most of the wines of commerce. In affections of the kidneys it is an excellent remedy, and should have a place in every well appointed cellar. It is a matter of some importance, that what cider is made, should be made in the best manner.

The apples should be well ripened, but not in the least decayed. Every apple with the least speck of rot in it should be removed, if you wish a first rate beverage. The decayed and inferior apples may be reserved for making vinegar. Perfect cleanliness should be observed in the grinding process which should be performed two days before pressing, and the pomace be permitted to stand and mellow in the vat, until it assumes a deep red color. Clean dry straw should be used in forming the cheese. If the straw be musty, the flavor will be communicated to the juice. If water be added, it will make it hard and unpleasant to the taste. The casks, also, in which it is put for fermentation, should be thoroughly cleansed, and finished off with a fumigation of brimstone. This is done by burning inside the barrel a few strips of canvas, dipped in melted brimstone. The fumes will penetrate all the pores and destroy the must and correct the sourness. After the fermentation is over, draw off into clean barrels, and clarify it. This can be done by mixing a quart of clean white sand with the whites of half a dozen eggs, and a pint of mustard seed, and pouring it into the barrel. It may stand in the barrel, or, if a nice article is wanted, it should be put into quart bottles and corked.

This cider will be fit to drink in case of sickness, and will always bear a good price in market. It retails at twenty-five cents a bottle, and would bring at least two dollars a dozen, by the quantity. This is much better business than to make a poor article from decayed apples, in a slovenly manner, and sell it for two dollars a barrel.

NEW ENGLAND.

By forgetting injuries, we show ourselves superior to them; he who broods over them is their slave.

Inherited riches can not purchase ornaments for the mind; these must be acquired by each possessor.

Beauty without honesty is like poison in a box of gold.

Birds.

MR. AND MRS. ROBIN RED-BREAST.

Much as we love the birds, and unwilling as we are to shoot down the songsters which surround our homes, we must yet bear testimony to the real character of some of them, from whom we had hoped better things. First and chiefly, let the robin step forward and receive sentence. Dear red-breast, of whom we heard in our childhood, so tenderly covering with leaves the babes in the wood, and who, we have long been told, lives chiefly on insects, stopping only now and then to take a cherry for dessert—dear old bird we have a charge to bring against you.

As to your living upon insects it is not true. You have nested in our orchard the past Summer, and though the trees have been infested with worms, crawling even around your nest, you have left them unmolested, and robbed our cherry-trees. The worms you have been seen to eat, were the common angle-worms, which you might as well have let alone, for they pulverize the soil, and do little or no injury to plants. But our cherries, how you did steal them as fast as they ripened! You cared little for the rarity and expensiveness of our fruit, but you swept the board clean, daily, leaving none for manners' sake. Had you been a bird of proper sensibility, you would have noticed our old hats, old coats and pants, those flaring pieces of tin, and other striking things hung up in the trees to warn off intruders, but you stupidly paid no attention to them.

And having stript our cherry-trees, you came to our strawberry patch, just ripening its tempting clusters, as we supposed, for our own table. And you brought along the younger members of your family—a hungry multitude. We soon found that you were good judges of the quality of fruit. Why don't the pomological societies call in a tasting committee of robins to decide about flavors? Surely, you know what good fruit is. Burr's New Pine and the Hooker Seedling, it is your unanimous opinion, stand first in deliciousness. They are good without cream and sugar. Albany Seedling, Early Scarlet, Hovey and such, are well enough "for market purposes;" but for something to please the palate, like nectar and ambrosia, you know where to find better.

You not only stole our berries yourself, but your example brought flocks of yellow-birds. What adroitness you all showed in accomplishing your purpose. Alighting some distance from the patch, as if engaged in lawful business, you soon approached it on all sides, running stealthily under the bushes and leaves, until at length you were in the midst of plenty.

As soon as the strawberries were gone, you were ready for our Antwerp and Orange Raspberries. Yes, you, so-called, "insect-devouring birds," left our cucumbers, melons and squashes close at hand, to be ravaged by bugs and worms, while you swallowed down our berries by the quart!

Nor is it a trifling charge that you devour the berries of ornamental shrubs and trees in the Autumn; such, for example, as the Tartarian Honeysuckle and the Mountain Ash. It is a nuisance to have these trees stript of ornament.

All things considered, we regard you a greater pest to the horticulturist than the hated cherry-bird. And yet, while truth compels us to bring these charges against you, we love you still, and will not harm you. No stalking Nimrod shall hunt you down, within our premises. At times, when your bad manners provoke our indignation, you may expect to hear a lump of dirt come whizzing about your ears, or Carlo may make you

quake with his barking; but beyond this, you have nothing to fear.

We love you for the bravery of your early advent amid the snows of Spring, heralding with your song the grand concert of the flowery season. We love you for the generous confidence you repose in us, hovering about our dwellings, and building your nests even in our porches and doorways. Without the life and motion which you and other birds give to our landscapes, how dull the scene would be!

Yes, we think a great deal of you, and will treat you tenderly. Now, please reciprocate our affection, by treating us with better manners in the garden and fruit-yard! Please do!

Experience in Raising Melons.

We gave ample directions for growing melons, in the *Agriculturist* for May; but we wish now simply to make record of our experience the present Summer. In accordance with the directions in this paper, we told our gardener to dig out holes in the ground, eighteen inches deep and two feet square, to put a little fresh manure in the bottom of the pit, and then to fill up with a mixture of rotted turf, leaves, sand, common soil and old manure, in about equal proportions. We used this recipe, because the corner of the garden which we wished to devote to a melon-patch, was a cold stiff clay soil, and needed a good deal of amelioration.

The melon seeds of four choice varieties were planted, and came up finely. They grew well, too, for a week or ten days, and the gardener received all due praise for his skill in preparing melon soils. But alas! After a heavy rain, our vigorous plants began to die, as if smitten by a sudden plague. A little examination showed that they were eaten off below ground by worms. We now asked the gardener how he had prepared the soil for the melons. What was our surprise to learn that he had forgotten most of our directions, and had filled up the holes with fresh horse manure nearly to the top, and covered it with only two inches of good soil and sand! The plants prospered until their roots struck down into the fresh manure, where in rainy weather the worms abounded. The case was a desperate one, but we resolved to try and save the remainder of our plants. So, having thoroughly soaked the hills with water from a sprinkling pot, we took up the young melons with balls of earth attached and laid them in the shade. The mass of half-decomposed manure was then mostly thrown out of the holes, and its place supplied with the ingredients mentioned at the head of this article. The young plants were then carefully reset and covered to keep off the sun. By uncovering them every night and shading them for several days, they at length became re-established and began to grow again. The vines are now loaded with handsome fruit, and promise soon to reward all our labor.

We give this detail of our experience, to caution others against the too free use of fresh manure in making beds for melons. For clay soils, a mixture of sand and old manure is very important; and if rotted turfs and muck from the woods are added, it will be all the better.

Lima Beans six feet High.

Who that has once tasted this delicious esculent can wish to spare any needful pains in cultivating it successfully? Many persons plant it in the richest soil, and give it the full liberty of a twelve or fifteen feet pole. The consequence is, that in gardens at the North, the upper half of the vine is practically useless. The strength of the plant is wasted in making branches high up in the air, which cannot mature pods before frost sets in.

North of New York city, Lima beans should be pinched in as soon as they have reached six feet in hight. They will then throw out laterals, on which pods will form and ripen before cold weather begins. And the whole vine will be within easy reach and management of the cultivator.

Peony.—*Paeonia.*

The genus *Pæonia* embraces an extensive class of herbaceous and woody plants. More than 200 distinct varieties have been cultivated by name, and new seedlings of more or less merit are being constantly brought forward. As a class they hold a high rank for beauty of appearance, while many of them are quite fragrant. In color they range from scarlet and red to pure white, with all the intermediate shades. Most of the herbaceous kinds, like the one shown above, have a very full double bloom, while some of the Moutan species have large single flowers.

The more common varieties have been cultivated for the past 200 years, and the oldest inhabitants all seem familiar with what almost universally found a place in their mother's flower bed, viz: the "*piny*" as they were wont to call it.

The *Moutan or tree* variety, on the contrary, is of recent introduction from China, by way of England. In its native country it is held in high esteem, and very extensively cultivated by all classes. Like the herbaceous species, it is perfectly hardy in this climate, and is a profuse bloomer, single plants sometimes producing from 50 to 100 large sized flowers at one time. Both species are perennial in *root*, and the tree variety partially so in its branches. Each is propagated by dividing the bulbous roots and resetting. The best time is in the Fall, say in October in this latitude, and in November at the South. They may also be put out early in the Spring. A few years ago when there was a great demand for the Chinese species, propagators divided the roots into very small portions, and making numerous short cuttings of the new succulent wood, engrafted them upon the roots and thus multiplied them very rapidly. They can now be obtained of most nurserymen and florists. The herbaceous varieties are sold at 25 cents to $2 each, according to newness or choiceness of variety. The Montans or tree varieties, at 50c. to $3 each and upwards. Some of the best common herbaceous kinds are the *Peregrinum, Grevilli, Whitlejii, Odorata, Carolina, Humei*, &c.; of the Moutans, the *Phenicea, Rosea Odorata, Incarnata, Papaveracea*, &c., are well known and highly esteemed. Other fancy varieties are held as high as $10 to $12 each. These last will of course be sought after only by the amateur.

Rhubarb.

IMPROVEMENTS, CULTURE AND VALUE—BY A PRACTICAL GROWER.

To the Editor of the American Agriculturist:

Within the past few years, Rhubarb or pie-plant has become one of the heaviest and most profitable articles produced by the market gardeners of our cities. The quantity raised for the city of New York alone is immense — 50 or 60 wagon loads arriving daily at a single market, are disposed of freely at remunerating prices. We have reports of sales from several sources amounting to from $200 to $400 per acre, and in a few instances this amount has been largely exceeded. This increased consumption is owing no doubt to improvements in the quality of the article. There is as much difference between the best rhubarb of to-day, and that of a few years since, as between the Bartlett pear and the choke pear of our forefathers. Formerly rhubarb furnished us only a tough and stringy pulp, with a rank acidity very uninviting to the palate, while we now are in possession of varieties which, when well cultivated, are tender as an apple, with an inviting and lively flavor, more sprightly than from any of the apple genus. These kinds of rhubarb are especially valuable for being the first and only fresh fruit of early Spring.

We are indebted chiefly to England for the high perfection attained by this plant. American gardeners have succeeded in obtaining fair varieties of seedlings, but inferior to those grown by our transatlantic competitors who have devoted more time and attention to this plant. The Linnæus, Victoria, and Giant, are the best English sorts procurable in the United States; Downing's Colossal, and Cahoon's Seedling are the most noted American kinds. Cahoon's is enormous in size, but is too stringy and tough, and has too much of a disagreeable rank flavor to be highly recommended. Downing's Colossal is good; still Charles Downing, its propagator, himself classes it as second to the Linnæus, both in productiveness and flavor, and I entirely coincide with him in ranking the Linnæus as the best variety of all. It is entirely free from stringiness, has a very delicately flavored and tender pulp, and is unusually productive and the earliest and latest in the market.

The Victoria is also excellent, and in well cultivated ground quite tender, with a pleasant flavor, but it matures a week or ten days later than the Linnæus, does not continue good so long, and it is less profitable for marketing. The Giant, a large, green variety, is coarser and later than either the Linnæus or Victoria.

For the proper cultivation of rhubarb, the soil should be rich and deep — "high farming" with this plant is well repaid. The most inferior variety in the garden, if taken from its customary neglected corner, and supplied abundantly with manure, and allowed a good exposure to sun and air, will double its crop and improve in quality almost the first season.

For field planting, I would advise the soil to be plowed 15 to 18 inches deep, and well enriched with stable manure. I would plant in Fall or Spring, and set the crowns about three feet apart each way, and mulch them with stable manure or any convenient litter, though this is not absolutely essential. I think a loamy or somewhat moist soil is best. Rich soil generally insures a strong growth of weeds, but they need not be feared, as

the rapid growth and mammoth leaves effectually check all noxious vegetation, thus dispensing with much of the outlay generally necessary for weeding other plants.

The best time for planting out rhubarb is in Autumn, as soon as the leaves die out, say the last of October, since this secures an earlier and better supply for use the next season. It may be planted in Spring, however, and yield somewhat the same year. The whole *roots* give the best immediate results, but each root is usually divided into six or eight *crowns* or separate pieces, which are sold by the dozen or hundred.

POMARIUS.

REMARKS.—We will add to the above, that every family may and should have a few rhubarb plants. In the Spring of 1857, we put out eight *roots* of the Linnæus, and three *roots* of the Victoria, manuring well with bone sawings. They gave about a family supply the first season, and this year furnished abundance for ourselves and a neighbor, and we are still using the Linnæus, which we prefer to any other. We know of no better "fruit" for *early* sauce and pies. We repeat, let every family put out a few roots, or crowns this year. Read the article on a succeeding page respecting a succession of summer fruits.—ED.

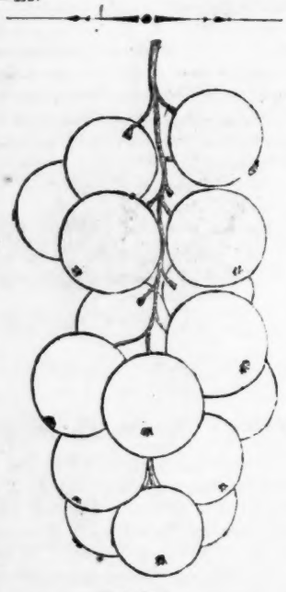


Fig. 1.

The Cherry Currant.

Above we give a good representation of the Cherry Currant, which is of large size, although the bunches are not as long as some other varieties. The berries are of a deep red color, semi-transparent, a little more acid than the red Dutch and of nearly uniform size even to the end of the bunch. It is productive, and of such large size, when properly grown, that the fruit readily brings a high price in market, measuring one-half to five-eighths of an inch in diameter, as will be seen by the engraving which is an exact representation of a bunch of the fruit.

The very large size of this fruit in the hands of amateur gardeners is, in part, due to the treatment such persons are wont to give the currant, and which would produce a marked improvement in the size of the Red Dutch, or other kinds. The too common method of allowing the bushes to throw up numerous suckers, as seen in fig. 2, without ever cutting out or pruning the old wood, keeps the bushes unthrifty, and in poor condition to mature a crop of good sized berries. On the contrary, if trained to the *tree* form seen in fig. 3,

Fig. 2.

Fig. 3.

heading back and cutting out each year, as necessary, all the forces of the plant are thrown directly into fruit rather than superfluous suckers. To secure the last form, take cuttings of eighteen inches in length and, with a knife, pare out the buds from one foot of the lower end and insert six inches in the soil. This will give a *trunk* of six inches in hight, which is quite sufficient. Let no suckers shoot up, nor leave side branches below that distance. By cutting back, from time to time, next to buds upon the sides you wish it to extend, a shrub, or tree of any desired form may be produced

Fig. 4.

Fig. 4, sketched from a bush in our own grounds is, perhaps, as good a form as any, its open head admitting sufficient sun and air into the center to fully perfect all the fruit. The mode of treatment to produce this last was minutely given on page 112 of Vol. XVI.

Peabody's Strawberry Again.

Last month, page 246, we gave our own experience and impressions in regard to this variety, which has called out numerous responses both for and against it. From all these reports we conclude that in some localities and with some kinds of treatment it succeeds admirably and gives the highest satisfaction, while in other places, and with different treatment it fails to fruit well. What is the most suitable soil and treatment to produce the best results we are unable yet to gather. In our own case, the soil was somewhat stiff, but made pretty good by previous manuring, and a free application of bone sawings was added, as before stated. One neighbor succeeded equally well with ourselves, on a poorer soil, while another with a fair soil moderately manured with horse droppings, obtained but a limited amount of fruit, though this was large and of a very excellent flavor. Of its superior flavor, deep color, and solid, marketable character there is no room for doubt. We can but hope that by cultivating it in hills, and checking the growth of runners which it sends out in great numbers, it will be found abundantly productive, in which case we shall rank it in the first class.

Geo. W. Robinson, of Onondaga Co., N. Y., writes under date of Aug. 3: "....In the Spring of 1857, I received a dozen plants from Georgia, by mail, and with care saved eleven. They grew vigorously without fruiting, and when I uncovered them the past Spring they appeared more vigorous than any one of 13 other varieties I have under cultivation. From my bed 5 by 17 feet I picked 14½ quarts of large delicious berries. The measurement of some of the largest was as follows: 3.9, 4, 4.2, 4.3, 4.4, 4.6, 4.7, and 5 inches in circumference. With my experience thus far, were I to choose, for garden culture only, two varieties from such as I am acquainted with, they would be Peabody's Seedling and Wilson's Albany Seedling...."

One Little Strawberry Plot.

If any body is content to do without an abundance of luscious strawberries, or to depend upon gathering the little wild things that grow in the fields, we do not envy their contentment. Here is our report with one little bed, just six feet wide and sixteen feet long, that is, a little more than *one-third of a square rod.*

May, 1857, we set out upon it 36 plants, half a dozen each of Longworth's Prolific, Hovey's Seedling, McAvoy's Superior, Large Early Scarlet, Burr's New Pine and Gen'l Jaquemont—the last named about worthless. Cost of plants 87 cents. The soil, a light clay loam made rich by hog manure in previous years, was deeply spaded, and four quarts of bone sawings (costing 13 cents,) were mixed with the soil in which the plants were set. We intended to cut off all runners and keep the plants in hills, but by oversight they got mixed, and no further attention was given to them except to pull out all weeds, and cut off with a spade all runners striking out into the surrounding path.

This year that bed supplied a *measured bushel* of large berries, besides a considerable amount eaten directly from the plot. A dollar and a half will cover the entire expense of the bed, labor included. We are now cutting out the superfluous plants and shall look for another bushel of fruit next year. Don't this *pay?*

White Native Strawberries.

To the Editor of the American Agriculturist:

I wish to call your attention to what is, to me, a new variety of Native Strawberries. The berry is larger than the wild red, of a *white* or *cream color*, and of a delicious pine-apple flavor. The leaf is smaller than that of the red variety, and of a lighter green. I think it has several advantages over the native red, one of which is the facility with which it parts from the hull. In picking two quarts yesterday, I could not find a hull attached to a single berry. They are ready to be dished out upon the table as soon as gathered and sugared.

I am located in the woods, among pine and hemlock timber, and this strawberry is found interspersed among red ones, over a tract of about twelve acres, used as a pasture.

FREDERICK HUNT.

Cattaraugus Co., N. Y., July 2, 1858.

REMARKS—We have grown the White Wood and Alpine Strawberries of Europe, but we believe this is the first indication that a branch of the same family is a native of this country. They may prove worthy of cultivation.

The Fastolff Raspberry.

So far as our own experience goes, this is one of the best raspberries for *home use*. It is too tender for distant marketing. The berry is of large size and excellent flavor, and very prolific. We will give an example. Seven plants were set four feet apart against a board fence on the west side of the garden, late in the Spring of 1856. They grew fairly and produced some fruit. The thrifty new canes bore well in 1857. Only 14 new canes, two in a hill, were saved for this year. They were trained against the board fence by nailing strips of leather around them, and during last Summer they were shortened at the top to four feet in hight, which induced numerous short side shoots. Now for the result. This year, in four weeks, we picked from the fourteen canes over *twenty* quarts of superior large berries for the table, besides what was eaten in the garden. As these stood close to the fence and are trained against it, and no straggling branches were allowed, they occupy very little room. Indeed, radishes and lettuce were raised on the ground around the canes. Here, then, is over half a bushel of fine berries produced with almost no expense. One dollar will amply cover the entire outlay for the original plants and all the time spent upon them, and the entire yield has been over a bushel of fruit. Comment is unnecessary. It should be stated that the soil is a good one, was deeply trenched, and it has been well enriched, first by a little bone sawings in the hill, and afterwards by frequent waterings with sink slops.

Brinkle's Orange Raspberry.

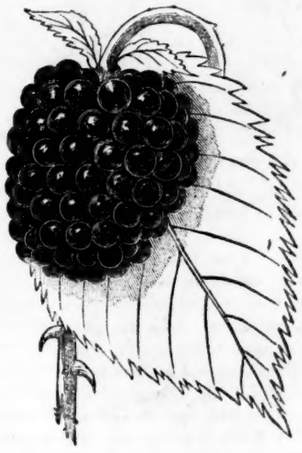
This is an American seedling originated by Dr. Brinkle of Philadelphia. The canes are strong and hardy, but require Winter protection. The fruit is of large size, conical, and varying from palish yellow to bright orange in color, and of firm flesh and fine flavor. It is a profuse bearer, holding and ripening its late berries better than most other varieties and is gaining popular favor, especially as a market fruit, on account of its fancy color and bearing transportation well.

The Allen Raspberry.

Of this we hear favorable reports from various quarters. Last Autumn we put out a quantity of the plants, side by side with the Red Antwerp. They were hastily put into the ground standing upright, the canes being cut down to about two feet high. They received no protection or attention of any kind during the Winter. In the Spring, every cane showed life to its very top, and considerable fruit was produced. So far as we could observe, the berries appeared nearly the size of the Antwerp growing near. Nor could we see much difference in the quality of the fruit, though the Allen variety was rather the sweetest. Taking into account its perfectly hardy character, we think it well worth cultivating.

Bagley's Ever-Bearing Raspberry.

We received a box of the fruit of this variety about the first of August. The berries are of moderate size, very good in flavor, and contain rather too large a cavity to bear transportation well. They are similar to wild varieties we have seen. The chief recommendation claimed by those who are familiar with them, is their hardy character, and continuous bearing. We cannot speak further from personal experience or observation.



The New Rochelle Blackberry.

The great value of this plant is now so well established, and has been so frequently set forth in the columns of this journal, where its merits were first brought before the public, that it would seem superfluous for us to add much more. Our own canes have borne luxuriantly the present year, and so have those of our neighbors, and every one we have talked with speaks of it in the highest terms. We have not seen or heard of any serious injury from winter-kill in this latitude. A few of the new canes starting from the ground this season, which were not shortened in, are 8 to 12 feet high, and an inch in diameter at the base. We advise keeping down the canes to about five feet in hight by clipping the tops, which developes a large growth of side fruit spurs for next year's bearing. The berries are of great size, well flavored, and the melting pulp contains very few seeds.

We present above an engraving giving the exact size of a berry. This is a large specimen, but not exaggerated, for we have handled hundreds as large. The average size of the fruit is not far from an inch in diameter.

The yield is so large that a candid statement would hardly be credited. Aug. 2d, we made our fifth annual call upon Messrs. Geo. Seymour & Co., of South Norwalk, Conn., and examined a half acre on which the canes are kept in hills 6 feet asunder, in rows 8 feet apart. Several gentlemen experimented by picking and measuring hills of average production, and the amount then actually growing upon the half acre was estimated at between sixty and seventy bushels, or over 130 bushels per acre, and this too, where the canes were kept so widely apart for the convenience of visitors. They have between four and five acres more where the canes grow more thickly, and the product of berries is, of course, much greater. The same parties have established a plantation of several acres in New Jersey, not only for raising plants for sale, but also to raise berries for market, and they will find their money in it, and so will others who go early into the culture. This year there is in this city a demand for the berries at twenty-five cents a quart at wholesale, very greatly in excess of the supply, and this will continue for some years at least. Indeed, parties make a standing offer of 25 cents per quart for all the fruit they can get, to make into blackberry wine. We have examined a very fine wine made last year by putting the juice of 80 quarts (2½ bushels) of the New Rochelle Blackberries with 86 lbs. of sugar into a barrel of 31½ gallons and filling up with water. As 80 quarts of berries give about 50 quarts of juice, and the barrel contains 126 quarts, the water and sugar together amounted to 76 quarts, or 1½ times the bulk of the blackberry juice.

Calling the berries 25c. per quart, and the sugar 12c. per lb., as it is now very high, we have $20 for berries, and $10 for the sugar, or $30 for 30 gallons of wine; or $1,00 per gallon, which is much below the wholesale market value—enough so to cover the labor of making—and a *profit*.

But 25 cents per quart will pay splendidly for growing these berries; they can be profitably raised for 6 cents a quart. We give these particulars because we believe that there is here a good field open for profitable investment, for those who have the requisite facilities of soil, etc., for going into the culture.

Newman's Thornless Blackberry.

The above engraving of this fruit has been prepared for the *Agriculturist* by Mr. A. A. Bensel, agent for Mrs. Newman, widow of the late Jonas Newman, of Ulster Co., N. Y., who discovered this variety in the town of Milton, in that county. The canes have comparatively few spines which led to the name *thornless*. The vines are not so vigorous in growth as the New Rochelle and Dorchester, and commence bearing late. Our own, planted in the Spring of 1857, are growing thriftily but have not fruited yet. The fruit we have seen is sweet and of good flavor. We are unprepared by experience to say anything definite respecting the fruit. Persons wishing to give it a trial will find the plants advertised in this paper.

Fruits—Everybody may have an abundance in a Year or Two.

This is a broad proposition, but strictly *true*. We do not of course mean a variety of large fruits such as apples, peaches, pears, plums, etc., but something equally good. Let us see how this is.

1*st. Rhubarb*—This is so good a substitute for apples, etc., that we may for convenience, class it among fruits. Eight to a dozen Linnæus Rhubarb (pie-plant) roots, set out the last of October, will furnish an excellent material for stewed

sauce and pies, from the latter part of May, until the end of August next year. There are many ways of cooking this plant. We have frequently had it so prepared in pies, that inexperienced persons could not distinguish them from those made of new apples, and we like them better. A dozen *crowns* of the Linnæus Rhubarb costs about two dollars now. The price of the larger undivided roots depends upon the size. For further items see article on page 275.

2*nd. Strawberries.*—By the time the Rhubarb begins to lose its novelty, the fore part of June, the earlier varieties of Strawberries will begin to ripen. Strong plants set out in September will yield considerable fruit the next season. We have gathered a small crop from plants set October 15th. A very trifling outlay will put a family in possession of any desired quantity of luscious Strawberries, from the middle of June to the tenth of July or later. Read what is said in another column of "One Little Strawberry Plot." If you have not done so, secure a dozen plants of each of say four varieties and put them out this month (Sept.), 12 to 18 inches apart, on a soil spaded one-and-a-half feet deep, with a good coat of bone-sawings, or well rotted manure. For four varieties we would say: Hovey's Seedling, Longworth's Prolific, Wilson's Albany, and Peabody's Seedling, if you can get it—if not, take Hooker or Walker's Seedling, or Boston Pine. Four varieties are enough for common use, though it costs little to add a few other varieties, say the Hooker, Walker, and Boston Pine just named, and the Crimson Cone, Burr's New Pine, Genesee, etc.

3. *Raspberries.*—The Strawberries will not be gone before Raspberries will come on. Where they are not growing now, a full crop can scarcely be obtained next year, but put out plants next month (Oct.), or even in November, and they will send up abundant shoots next season ready for bearing the following year. The Raspberry and Blackberry send up new canes one Summer to produce fruit and die out the next. Canes two or three feet or more in hight, if set out in Autumn, usually bear the next year. Provided you will take care enough of them to simply bend them down in Autumn and cover with a little earth and uncover early in the Spring, we advise for *home use* to get the Fastolff variety, and also some of the Brinkle's Orange and Red Antwerp. But where Winter protection by covering can not, or rather will not, be attended to, though it is but little trouble, we recommend getting hardy varieties, such as the Allen, Black Cap, and American Red. It may be well to have some of the Allen, and Black Cap, in addition to the Fastolff, Antwerp and Brinkle. None of these varieties are now expensive, except the Brinkle, and this will soon become more plentiful and cheaper. Twenty-five, fifty, or a hundred plants will cost but a few shillings, or dollars at most. They will grow on any naturally good soil, or one made so. Spade the ground deeply, and dig in plenty of any well-rotted manure. If the soil be heavy clay, mix with it a quantity of black mold or decayed leaves from the woods. We have found sink-slops an excellent fertilizer. The canes may be transplanted as soon as the leaves drop off—usually early in Oct. They bear packing and transportation well, and may therefore be obtained of any near or remote reliable dealer. Put out a few this Fall, no matter where you live, and when you enjoy the luxury of the fruit we shall have your thanks for urging you to do so.

4. *Blackberries.*—These will follow hard upon the Raspberries, and keep up a succession of fruit. For the bearing of Blackberries you will need to wait a year. Put out the plants in Autumn, any time before freezing up of the ground, the sooner after the leaves drop off the better. They will bear a poorer soil than the raspberry, but will repay generous manuring and tillage. We put the New-Rochelle variety at the top of the list. It is hardy, a great bearer, produces fruit unequaled in size. To this may be added the Dorchester. If it be impossible to obtain either of these varieties get Newman's Thornless, or failing to secure this, take up some canes of the best wild kinds growing near; manure and cultivate well, and improved fruit both in quality and quantity will be the result. But we advise every one who has a fourth of an acre or even less of ground, to set out this very Fall a dozen, twenty, or more of the improved sorts. They multiply rapidly after being once well established. Blackberries bear packing well and may be carried any distance.

SUMMING UP.

The above four kinds of fruits will form a succession of delicious fruit for a period of full three months; and, to say nothing of the comfort or luxury, there is profit in their culture. They repay their cost in the saving of other kinds of food. Thousands, yes millions of persons, especially those residing at the West, are longing for the time when their young orchards—perhaps not yet planted—shall produce the old staple fruits; but why wait? A little trouble, and a comparatively trifling expense, such as we have pointed out above, and in other separate articles in these pages, will put all these persons in possession of luxuries unsurpassed by the costly viands of the rich, in less than two years.

IN DOOR WORK.

About Soaps.

The *alkalies* are caustic (burning) substances that have the property of uniting with acids (sour substances) to form compounds which are usually inert. Thus: strong, caustic, newly burned lime and the powerfully corrosive acid, oil of vitriol (sulphuric acid) unite and form the tasteless compound known as plaster of Paris, or gypsum, used as a fertilizer. Pure soda, which is so caustic as to destroy the flesh, unites with the same acid, oil of vitriol, to form common Glauber salts (sulphate of soda.)

The alkalies have also the property of dissolving oils or oily substances, and on this account they are used in washing, to remove the oily materials that collect upon the garments from the skin or other sources. As explained on page 89, the principal alkalies generally known, are: *potash, soda, ammonia* (or hartshorn,) *lime, magnesia*, and they may be remembered by their initial letters forming the word *p s a l m*. Of these, potash, soda and lime are most common. Potash is washed out from wood ashes, the water being boiled away.

But the pure alkalies are too corrosive to the skin, and to garments, to be used alone in washing. On this account, both potash and soda are rendered mild, or less corrosive, by first uniting them with oil in the form of *soap*.

There are many kinds of soap. If potash, which is the alkali in ley obtained from wood ashes, be united with oil, it forms a semi-fluid or soft soap. Add to this some soda, or salt (which contains the metalic base of soda,) and the soda will expel the potash and take its place. We then get soda soap which is a *hard* soap, capable of being cut into cakes or bars. Hard soap may be produced directly by using a solution of soda with grease, and boiling it down sufficiently.

Common resin* may in part be substituted for oil. All brown and yellow soaps are soda, oil and resin combined. If the resin be somewhat less in quantity than the oil, the soap is very good for common purposes. We are not sure that the addition of a small quantity of resin does not improve the soap for extracting oily matters from garments. This much is certain, that a teaspoonful of spirits of turpentine added to a tub of soapsuds improves it for washing; and the turpentine is similar to resin. As brown soap is much lower in price than white soap, and if equally *dry* as effective pound for pound, if not more so, the brown kinds are the cheapest. Very brown, dark colored soaps contain too large a proportion of resin and should be avoided.

Castile soap is made of olive (sweet) oil and soda, some coloring matter being added to give it the mottled appearance. Genuine Castile soap is a rare commodity, however, as most of that sold under this name differs only from good common hard soda soap, in being colored.

Windsor Soap is made of soda united with a mixture of cheap olive oil and tallow.

The very white hard soap we frequently see is simply soda and tallow.

Walnut oil soap, cocoa-nut oil soap, palm oil soap, almond oil soap,, etc, are made of soda combined with the various oils indicated by the name. Most of these articles, now-a-days, are no more than common white or colored hard soaps scented with a trifle of an extract or oil of the article from which the particular specimen is named. Take a piece of common hard soap, cut out a little plug, as if you were trying a water melon, put in a few drops of any aromatic oil; return the plug and you will have a fancy or scented soap. This is a convenient method of "improving" a piece of Castile soap for the wash-stand. Any oil you chance to have, bergamot, cloves, various mints, etc., will answer for this purpose.

Transparent soap, often called walnut oil soap, military soap, erasive soap, and several other names, is made by dissolving white soap in alcohol. It is of course more costly, but the alcohol remaining combined with it, assists its solvent properties without rendering it injurious to the skin or clothes, and hence it is valuable for removing "grease spots," or washing delicate fabrics, and the face and hands.

NOTE.—**Resin* is often spelled and most commonly pronounced *rosin*. It is in some parts of the country vulgarly called "*rosum*." The correct spelling and pronunciation is *res-in*, accenting the first syllable and giving *e* the short sound of e in met

Blackberry Wine.

There are several processes recommended. The following is perhaps as good as any one of them: Put the berries into a coarse cloth—linen is preferable, though cotton or woolen will answer—and press out the clear juice. Add one quart of water to from three to four quarts of the juice, and also add about three pounds of good sugar. White sugar is preferable, but light brown may be used. Stir until the sugar is well dissolved and then put in a clean keg, setting in a cool place. Leave the bung open, covering it with millinet or gauze to keep out flies and other insects. Let the fermentation go on for several weeks. When the lees have all settled and the liquid become clear, draw it off and cork in bottles. It may be kept, without bottling, in casks, or in jugs. It should always be placed to ferment at first, in some convenient vessel for drawing it off without disturbing the lees. A cask with an end faucet is best for this.

The preceeding was put in type Aug. 2, in order to send proof slips to several inquirers desiring immediate information. We have since examined the results of our own experiments, and also conversed with others on the subject. Aug. 1857, we expressed the juice from a quantity of New Rochelle Blackberries, and put it up in three methods. Each kind was kept in glass bottles and stone jugs, and left uncorked and undisturbed to this date. A piece of millinet was tied over the mouth of each vessel to keep out insects. The vessels were set on a shelf in the cellar. The juice was obtained by mashing the berries and straining through a linen cloth.

No. 1.—One quart of blackberry juice, two quarts of water, and three lbs. of white sugar. This is now nearly a good *vinegar* with a beautiful reddish color, and strong wine flavor.

No. 2.—One quart of juice, one quart of water, and two lbs. of white sugar. This is now a beautiful wine. Several gentlemen have tested it and all say it could hardly be improved.

No. 3.—One quart of juice and 2 pounds of sugar. This is now a heavy wine, of excellent quality, though rather strongly flavored by the fruit. It will doubtless improve by age.

We think all the above should have been drawn off from the lees after standing six or eight months, and kept closely corked in a cool place, though Mr. Seymour, who recently presented us with a fine blackberry wine, thinks the flavor improved, if anything, by letting the lees remain in the bottom of the cask. No. 2 we think the best recipe, and by referring to the article on "New Rochelle Blackberry," on page 277, it will be seen that this agrees nearly with Seymour's mode of manufacture on a large scale.

Blackberry Marmalade, of quite acceptable quality was made by adding a pound of sugar to a pound of the material left in the cloth after pressing out the blackberry juice.

Elderberry Wine.

S. M. Luther, of Portage Co., O., gives us the following recipe, which he uses, and he states that the wine he now has, which was made three years ago, is pronounced by competent judges quite superior, in point of flavor, to the domestic wine in use. He directs: Mash and press the fully ripe berries, and to one quart of the juice add 3 qts. of water and 4 lbs. of sugar. After the sugar is dissolved, strain and add two table spoonfuls of yeast to each gallon of the liquid, allowing it to stand in an open vessel from ten to fifteen days, according as the weather is cool or warm, when it should be carefully drawn off and bottled for use. Keep it in a cool place.

Remarks.—We would use a much less quantity of water with equal juice, and add 3½ lbs. of sugar with — say ¼ oz. of either allspice or cloves. and ¼ oz. ginger root to a gallon of the liquid.

Tomato Catsup.

Mrs. Vorce, McHenry Co., Ill., contributes the following to the *Agriculturist:* Boil half a bushel of tomatoes 15 or 20 minutes in a kettle, with just sufficient water to cover the bottom. Mash and rub them through a sieve, add a tea cupfull each of ground pepper and allspice, ½ of a tea cup of ground cloves, and the same amount of salt, 3 red peppers and 3 garlics. Scald together and put in a stone pot, taking off the scum until it is done rising when scald again, and having added one gill of brandy, bottle for use. The same proportion may be adopted for a smaller quantity. Mrs. V. says this is excellent.

Preserving Fruits for Winter.

GLASS BETTER AND CHEAPER THAN TIN.

To the Editor of the American Agriculturist:

Your frequent chapters under this head lead me to give my experience, as I believe there can scarcely be too much said in favor of putting away an abundant supply of the Summer and Autumn fruits, in a *fresh* state to relieve the monotony of "salt junk," that too prevalent diet of the farmer during the winter season. I am glad to see you set your face — and pen — against the use of so much *candied* fruit, in which a pound of fruit is cooked up with its pound of fine sugar, thus destroying the flavor and producing an indigestible compound.

I have used both tin and glass, for keeping fruit fresh, but greatly prefer the glass. I know the can men tell us that nothing injurious comes from tin, even with acid fruit, so long as air is entirely excluded from the cans. I will not discuss this question with them, but am *certain* that no deleterious substance can come from glass under any circumstances. Besides, there is a real satisfaction in looking at a transparent jar of peaches, plums or berries, requiring no label to designate its contents. Again, if perchance the sealing should be imperfect and the fruit give indications of not keeping, it can readily be seen and be used at once. But the most important consideration with me is *expense*. Most of the patent cans cost $2,50 per dozen, for quart sizes, while the glass jars I use, of about the same size, cost but 75c. per dozen. As we intend to put up near 100 quarts of various kinds of fruit, we shall save about $14 by using the glass, which will certainly allow for a trifling breakage, though we have found no trouble in that respect.

The jars we use are common glass with a trifling green shade, but still quite transparent. They are eight inches high, the main body being about 4 inches in diameter. The neck is wide, being full 2 inches inside diameter, which allows the smaller fruits to be put in whole if desired. We adopt two methods. So long as we have large corks we insert these over the fruit, covering them with waxed cloth. We sometimes put over simply waxed cloth. We set the bottles around the stove door to heat gently at first, and have them hot when pouring in the hot fruit. The corks are kept in a dish of warm water to soak soft and pliable. A basin of wax, made by melting and stirring together one pound of resin and one ounce of tallow, is kept melted on the stove ready for use.

The *Fruit* is put into a *porcelain* kettle with just sugar enough to sweeten it for use. It is then heated to the boiling point, but not cooked above two or three minutes, except tomatoes, and some of the larger fruits, and vegetables, which may boil ten minutes. With a long handled dipper, and a fruit funnel having a large orifice just fitting the mouth of the jar, I fill them very rapidly, while an assistant follows, pressing in the corks ⅛ to ¼ of an inch below the surface and pouring on melted wax to fill it. She immediately ties over a piece of cotton cloth previously coated on both sides with the same wax. This seals them perfectly.

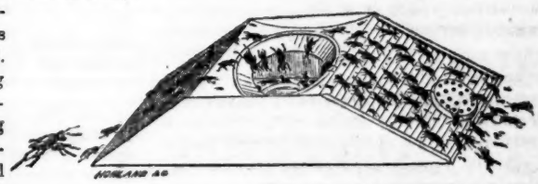
Having secured a large quantity in this manner with entire success, I shall pursue the plan, mainly, as the corks make neater work, and give additional security, though we put up some without the corks, as your Ohio correspondent suggested in the August *Agriculturist*.

In addition to the smaller fruits already prepared, I intend to put up largely of tomatoes, peaches, plums, pears, quinces, late rhubarb, and that Yankee luxury, *pumpkin*, that I may have pies in Winter and Spring of better flavor than made from dried pumpkins.

Long Island Housekeeper.

Parsnep Sweetmeats.

The following contributed for the *Agriculturist*, by Miss Sarah M. Taylor, of Saratoga County, N. Y., may be useful for those who use preserved sweet-meats—we eschew them altogether since we have learned the art of keeping fruit fresh. The recipe is perhaps more appropriate to Spring. Miss T., gives the following directions: "Take the largest part of the parsnep; and if wilted soak in water until swelled out plump. Cut across into round pieces an inch thick; scrape the skin off and weigh. Put them into a brass kettle, cover with hot water, laying a plate over to keep them down. Boil until a broom splint will go through the pieces, and lift them out separately with a fork, laying on plates to cool and toughen. For each pound of fruit use ¾ lb. of white sugar dissolving it in the water in which the parsneps were cooked, and boil, removing the scum. Add the fruit, covered with a plate as before, and boil until the whole looks clear. Then take the pieces out upon plates, and boil down the syrup until it becomes ropy, and cool it in an earthen or tin vessel. For each pound of the parsneps take one lemon, grate the outer yellow peel, rejecting the inside rind which is bitter, and also pick out the seeds from the pulp which is to be used whole. Put the syrup, pieces of parsnep, grated lemon peel and pulp, all into earthen pots, adding a stick or two of cinnamon bark, and a tablespoonful of cloves, and of ground cinnamon for each pound."



A Cockroach Trap.

Cockroaches are not very troublesome in inland towns, we believe, but along the sea-board they are a decided nuisance. A hundred plans have been proposed for getting rid of them, but they abound as much as ever. We give herewith an engraving of a simple trap presented to us a month since. It was invented by I. S. Clough, of this city. Our own dwelling being comparatively new, is fortunately free from these pests, so far, and we handed the trap to an associate, who reports that it operates finely until the cockroaches "pile in so thickly as to raise a mound for the next comers to crawl out on." The trap is simply a tin box of the form here shown. The inclined ends are roughed with a firm coating of sand to make the ascent easy. A little molasses is put into the shallow cup within, and the insects in attempting to get at it slide down the beveled opening, and are unable to crawl out, if the inside upper surface be kept bright and clean. The dotted circle on the right is a movable punctured cover, which serves the double purpose of an opening to clean out the trap, and to attract the insects by giving them a sight of the molasses and what is going on within.

Fig. 1

Another Washing Machine.

We have had frequent chapters upon "Washing Day," "Washing Machines" and "Washing Recipes," but we have no fear of tiring our readers with this subject, so long as there is a hint to be given which will tend to lighten the labors of that "worst day of all days in the week," as a lady correspondent fitly terms the "second day." Sometime since we described "our new wash-tub." We liked it then, we like it still, for in *principle* it is right. But we have since got another new wash-tub, or *machine*, which we think very valuable. To say nothing else, it has shortened the washing-day, at least two hours, and by so much at least, *we* consider it an acquisition. After six weeks trial we esteem it highly enough to give it our unqualified approval as a useful implement, and we have therefore got up for the *American Agriculturist* the accompanying original engravings, and will present a brief

DESCRIPTION.

Fig. 1 shows the implement set up and in operation. *a*, is the tub, 26 inches high, and 24 inches in diameter at the top and 21 inches at the bottom. The tub stands upon the base-board *b*. The pounder *c*, is made up of a series of 16 smaller pounders or pestles, *p*. One of them is shown enlarged at *P*. These pass loosely through *c*, being held from dropping out by small brass pins. A strong spiral brass spring, *w*, keeps them down as far as the pin across the top will permit. It will readily be seen that when brought down forcibly upon clothing in the tub, the small pestles or pounders will yield, by compressing the springs *w*. This effectually prevents tearing the fabrics washed, breaking buttons, etc. A lady correspondent tells a pretty tough story of it: she asserts that a small thick cologne bottle left in a dress was not broken, though the dress was pounded clean. We cannot doubt her word, but we would advise clearing the pockets of such fragile articles as glass bottles, even when using the "Metropolitan Washing Machine." We tried letting the mass of pestles strike down upon the foot, with considerable force, and it scarcely produced a painful sensation. We can say this much, that there is certainly a great saving of buttons and in the wear of garments, when they are washed with a series of yielding spring pestles like those here shown. This separate arrangement of independent pestles divides the force so that the inequalities upon a mass of clothing in the tub are fitted by the yielding springs. Again, the surface of the water is so broken up that there is none of that splashing which occurs when a broad single pestle is struck down. In several trials we found it next to impossible to splash the water over the sides of the tub.

Fig. 2.

Fig. 3.

The pestle or combination of pestles is hung at *d*, (fig. 1,) on a double cord *r*, which can be shortened by simply twisting it. This cord is stretched between the upper ends of two wooden *springs*, *s*, *s*. These springs are thin strips of tough wood set loosely into mortices in the baseboard, *b* so that they can be taken out when not in use. In order to show its construction we have elevated the pounder above the surface of the tub, though in ordinary use it is not raised so high. It may be worked with one hand as in fig. 1, or with two hands upon the cross piece, *h*, as in fig 2, where the pestle is down upon the clothing and just being thrown up by the springs.

Fig. 3 shows the springs, base-board and pestle packed into the tub and the whole set aside. It occupies no more space than the width of the tub 2½ feet, and the hight of the springs (6 feet).

The whole operation is simple and effective. The batch for washing is 25 to 30 yards of cloth or say eight or ten shirts, or their equivalent in other garments. Our first trial was upon a lot of bed quilts being washed and put away for Summer, and these at once brought out the capabilities of the machine for heavy work. The springs throw up the pestle well, and it works so easily that a woman of only moderate strength is able to give it the requisite motion and forcible blow, and still stand in an *erect* position. We hope some ingenious mechanic will next bring out a *wringing* machine.

The price of the machine, $10, we thought rather high, and in behalf of our readers we wrote several expostulating letters to the manufacturers; but they gave us the items of cost which can not be well reduced without making a poorer article, and on the whole we suppose that without enormous sales these tubs can not be offered at a lower rate. They are certainly worth the money to *purchasers*, and though our own was presented unsolicited and even against our wishes, we should now be loth to part with it for twice $10 if it could not be replaced. It came from David Lyman of Middlefield, Conn., and judging from this and others we have seen of his manufacture, we can recommend them as of first quality of materials, &c. Particulars as to sale, etc., must be looked for in the advertising columns.

To Dye Black.

"Kentucky Housewife" sends us the following which she says has saved her several dollars: Dissolve 1 lb extract of logwood in 5 galls. soft water, boiling it for a few minutes in an iron vessel, and add a tablespoonful of copperas. Dissolve 1 oz. of blue vitriol in 5 galls. of soft water. Scald the materials to be colored, first in the vitriol water, then boil them for two hours in the logwood, stirring often. To set the color, wash in a strong lather of home-made soap and dip in salt water. Sweet skimmed milk is also good to set the color. To give a luster to old silk, or that just colored as above, strain some cold coffee, and add a little gum arabic, into which, when dissolved, dip the silk; wring out and iron on the wrong side.

To Dye Cochineal.

Also, from "Kentucky Housewife": Boil 3 lbs. of yarn 10 minutes, in a liquor made of 3 oz. cochineal dissolved in 3 galls. water; then add 2 oz. cream of tartar, 3 oz. muriate of tin, and boil 10 minutes longer, after which wring out and rinse in soap suds.

To keep Flies from Ceilings.

Hang in the room several sprigs of asparagus foliage, which can be gathered in a few weeks after cutting for the table is over. These, neatly arranged in festoons around the room, are rather ornamental than otherwise, and the flies will always collect upon them in preference to the walls or ceilings. Any kind of shrubbery, or slips of paper, will answer a similar purpose. A little trouble of this kind will keep the plaster or wall-paper looking neatly; and if a room be not otherwise soiled by exposure to smoke, or dust, at least one-half of the annual or semi-annual whitewashings may be saved.

Clough's Fly Trap, noticed and illustrated on page 247, has worked admirably with us the past month, catching flies by the handful daily; though for every fly caught it would seem as if a dozen came to attend its burial. Such of the mourners as would not pay their respects to the trap, have been furnished with roosts in the asparagus branches.

Boys' and Girls' Own Columns.

Telegraphing Familiarly Explained.*

Everybody is now talking about the telegraph, and we think our younger readers will be interested in some plain, simple explanations of *how* news is sent along wires, not only across the country, but even under the ocean. We will therefore endeavor to illustrate this subject in a more simple, elementary manner than is usually done in books and papers. So come right around us, boys and girls, and listen to, and carefully study and understand every sentence as we go along, and we think you will then have a pretty clear idea of the matter.

I. *What is Electricity?* We cannot exactly tell, but we know that it appears to be an *invisible* fluid, filling all space, and penetrating all substances, like air, for example, which is everywhere, but cannot be seen.

If we take two tight tin cans, or bottles, and connect them with a hollow tube, and then collect all the air from both the cans into one of them, it would rush back into the empty one, if the connecting tube be unstopped.

Suppose we take two tight cider barrels, half full of water, and set them ten feet apart, and run a hollow tube from the bottom of one to the bottom of the other. In one end of this tube put a force pump. By working this pump, all the water would be forced from one barrel into the other, so that one would be full of water and the other empty. But now take a lead pipe, half a mile in length or more, and bend the two ends near enough together to have them enter the barrels, one into each. If we continue to work the pump in the bottom tube, the water will be forced into the full barrel and it will also be forced through the long lead pipe *back* into the empty barrel, and so long as we keep the pump going, a steady stream of water would run through the long pipe. If our lead pipe was a thousand or two thousand miles long, the current would still run through it *if we worked the pump strongly enough*.

II. Suppose now we could have these barrels filled with the invisible electric fluid, of which we have spoken. Since this fluid does not require a hollow tube to pass through, but it travels best through a *solid* metal wire, passing between the particles, or from particle to particle, we could join the bottom of our barrels with a wire, and also put a wire in the place of our lead pipe. Then put an electric pump (electric battery) on the wire, and it would force the electric fluid all into one barrel, but it would go back through the long wire. If we cut the long wire in two, the current of electric fluid would stop, but go on again as soon as we brought the two ends of the wire together where they had been cut apart.

III. We will now examine an electric pump (battery.) Fill a tumbler half or two-thirds with water, and put into it some vinegar or other acid (sour) substance. Next set in the tumbler upon one side a slip of zinc, and upon the other, a similar slip of copper, as seen at *z* and *c* in fig. 1.

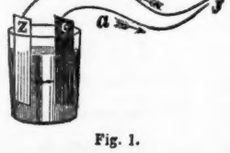


Fig. 1.

Fasten two long wires *a* and *b*, to the top of each slip.

The acid will rust or eat away the zinc, and it has been found that this rusting process acts like a force pump, that is, it seems to extract electricity from the rusting zinc, and drive it through the water to the copper, upon which it collects in superabundant quantities. But join the two wires *a* and *b*, at *j*, and the electricity will run around the wires back to the zinc, just as the water through the long pipe, and just as the lightning runs down a lightning rod from a cloud to the earth. Sometimes in a strong battery (the whole of fig. 1 is called a *battery*,) so much electricity will collect upon the copper, that it will jump from *a* to *b* before they are brought quite together, and we see a little bright spark. This is a miniature shock of artificial lightning. So long as the wires *a* and *b* are joined into one, a constant stream of invisible electricity will flow from the zinc *z*, through the water to the copper *c*, around through *a* and *b*, and back to *z*, and so on round and round. Remember that the instant you separate the wires at *j*, the current is stopped. By constantly joining and separating these wires at *j*, or at any other place, you can have the current of electricity *flow* or *stop*, just when you desire. This fact is to be carefully noted, for upon it depends the communication of thought by a telegraphic wire. *Remark*—These wires, *a* and *b*, may be but an inch or two in length, or they may be thousands of miles long, and still allow the electric fluid to pass through their whole length, if the force-pumping (or rusting) at *z* be powerful enough to drive the current through so long a wire.

IV. It is a remarkable discovery, that the ground may be substituted for one of these wires; thus

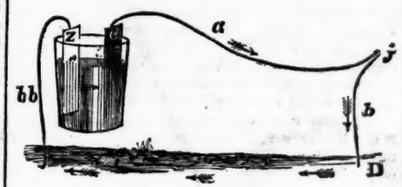


Fig. 2.

If the wire *a* be carried on poles, or in a glass or gutta percha tube to a distant point *D*; and *bb* simply carried down into the moist ground, and *b*, a short wire, be taken from the ground at *D* and joined to *a* at *j*, then the current of electricity will be forced through *a*, down into the ground through *b*, back through the earth to *bb*, up through *bb* to *z*, and so on round, in a continuous flow. *Remark*—The current can at any time be stopped and started again by opening and closing the break at *j*, or a similar break anywhere on *either* of the wires.

V. A current of electricity flowing through a wire produces some wonderful effects, but we can only describe one which is important to our purpose. If the needle of a mariner's compass be held near the wire while the current of electricity is flowing through it, the needle, if free to move, will turn round and stand across the wire (at right angles to it.) *Remark*—It is believed that there are great currents of electricity constantly flowing round the earth's surface from West to East, and that these cause the compass or magnetic needle to stand across them and point North and South.

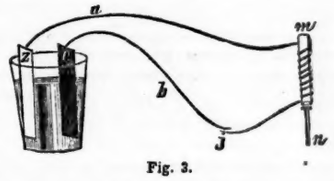


Fig. 3.

Let the wire, *a*, pass across a piece of hardened steel, a knife blade for example, and, strange to say, the current of electricity, flowing near but *not touching the steel*, will change it to a magnet, so that it will pull up other bits of steel or iron and hold them precisely like a lodestone. If the wire be wound several times around a steel bar *m*, as in fig. 3, it will make a still stronger magnet so that it will hold up a heavy weight. And this hard steel rod will afterwards remain a permanent magnet. *Remark*—By a process like this our steel magnets, and magnetic needles are now made, instead of rubbing them upon a lodestone, as was formerly done.

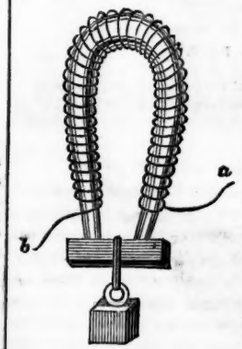


Fig. 4.

Fig. 4 shows a *soft* iron electro-magnet, which may be made to hold up a weight many hundreds of times greater than itself, simply by connecting the wire *a*, *b*, with a battery like fig. 1. But the moment the wire is cut or disjoined, the weight will drop off, and the magnet will not hold the smallest nail.

VI. Now mark an important point in our explanation. If we lay a piece of *soft* iron upon a lode-stone, it will become a magnet and attract other pieces of iron, *but only so long as it is in contact with the lode-stone*, for the instant it ceases to touch the stone, that instant it ceases to be a magnet. Just so in fig. 3. Let *m* be soft iron, and while the current of electricity flows through *a* and *b*, so long *m* will be a magnet and hold up the bit of iron, say a cut-nail *n*. But separate *a* and *b*, at *j*, (or at any other point,) and that instant *m* will *cease to be a magnet*, and *n* will drop off. Join the wires again to allow the electricity to flow and *m* will again be a magnet and draw up *n* to itself. *If we separate and join* a *and* b *a thousand times in a minute, then* m *will be a magnet and not a magnet a thousand times; and the nail* n *will rise up and fall down just as often as this change takes place.* If *j* (fig. 3) be a thousand miles from *m*, and a person at *j* break and join the wire once, then another person at *m* would see *n* drop down once and rise up again. If the wire be separated at *j* twice, then *n* would drop off and rise up again twice. This is one way, you see, by which *signals* can be made by one person to another a great distance away, that is, he sets in motion or breaks a current of electricity coming along a wire from that point, and makes or unmakes an iron magnet (called an *electro-magnet.*) [Now read over the preceeding sections and especially this last one, No. VI. until you perfectly understand it.]

Fig. 5.

VII. In fig. 5, we see how the same wire passes around several pieces of iron, say at *B.*, *N. Y.*, *P.*, *W.*, and *N. O.*, which stand for Boston, New York, Philadelphia, Washington and New Orleans. (Only one wire goes through the air, the current of electricity comes back through *b*, and the ground.) What we would explain particularly is, that the same current of electricity flows instantaneously around *all* the magnets, *m*, *m*, *m*. *m*, *m*, affecting them all alike. The nails under them will *all* be drawn up, the instant *a* and *b* are joined at *j*. When the wires are separated, to stop the current, all the nails will drop off because all the iron bars *m*, *m*, *m*,.... cease to be magnets. In this way a person at *j* can give signals at all the distant places at the same time. And the same is the case of each of a thousand other places along the line, wherever the wire is bent out of its course and wound around a bar of soft iron.

Note still further: If the wires be *joined* at *j*, then *a* may be broken and joined at any other point—it matters not where on the line; the stopping of the current at one point, stops its flow through the whole length, forward and backward. Thus a person may stand at *P.*, (Philadelphia,) and give signals at *B.* (Boston,) and *N. O.*, (New Orleans,) and all intermediate places at the same time, by simply opening and closing the current on the wire where he stands, that is, alternately joining and separating the wire at his point. [In making telegraphic signals, convenient springs and keys are arranged for opening and closing the currents.]

We trust you now understand the principle of Morse's Telegraph. Suppose John to be at Boston, and James at New Orleans. James unites the wire at his end with the ground wire *b*, and all the nails jump up to the magnets. John separates the wire at his end, and they all drop off. James knows that this means E, in their agreed *signal* alphabet. Then John joins and separates the wire twice very quickly. The nails jump up and fall back twice, because the iron bars *m*, *m*, *m*,.... have been made magnets twice and unmade, in quick succession. This is the signal for the letter I. Three currents stand for S. Closing the wire and holding the nails up for an instant, stands for T. Closing it for a moment, then breaking it, and closing and breaking it suddenly again, stands for N, — · ; and thus by a succession and continuation of signals, long and short ones, all the letters of the alphabet are indicated. You will note that it matters not whether John or James, or any one else at any other point, opens and closes the wire, the same effect is produced at each and every station on the whole line. We will here give you the combination of marks and dots indicating the long or short currents, which stand for the letters in

Morse's Telegraphic Alphabet.

LETTERS, NUMERALS AND PUNCUTATION.

A · —	O - - -	1 · — — -
B — · · ·	P · — — ·	2 · · — — ·
C — · — ·	Q — — · —	3 · · · — -
D — · ·	R · — ·	4 · · · · —
E ·	S · · ·	5 · · · · ·
F · · — ·	T —	6 — · · · ·
G — — ·	U · · —	7 — — · · ·
H · · · ·	V · · · —	8 — — — · ·
I · ·	W · — —	9 — — — -
J · — — —	X — · · —	0 ———
K — · —	Y — · — —	(.) · — · — · —
L · — · ·	Z — — · ·	(?) · · — — · ·
M — —	& · — · · ·	(!) — · — · —
N — ·	&c · — · — · — ·	

So far we have made no provision for writing down these signals by machinery. Indeed, this is not strictly necessary. If you stood near one of these magnets, and

* Entered according to Act of Congress in the year 1858, by ORANGE JUDD, in the Clerk's Office of the District Court of the United States for the Southern District of New-York.

saw the nail *n* hop up and instantly drop, you would mark down a - to represent E. If it touched the magnet and dropped, and then instantly touched it again, and remained in contact for a moment before dropping, you would mark -— to represent A. If it jumped up and dropped twice quickly, you would mark -- for the letter I. If it next touched the magnet instantaneously, then fell off, waited an instant and touched the magnet again, and afterwards remained off, you would put down two dots with a space between them, thus - - to indicate O. If it touched the magnet only once, but remained *sometime in contact* before falling off, you would put down a long mark, thus —— for the letter L. In this manner, you would soon understand how to read all the letters of the alphabet, and the figures also. Practice would enable you to read a hundred words a minute. When all the words to be communicated to you are thus spelled out, a signal is given, and the other end of the wire can be closed and you open your end, and by alternately closing and separating the ends of the wire, you will make whatever letters at the other end you desire.

Morse's Telegraphic Recording Instrument.

There are various kinds of instruments for recording upon paper the several marks indicating letters. We can only explain one of them in the space we have.

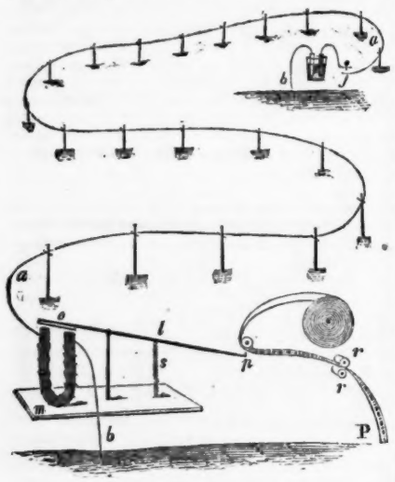


Fig. 6.

In fig. 6, the wire, coming from a distant battery, passes around a piece of soft iron *m* bent upward like a horse-shoe, and called a *horse-shoe magnet*. Above the upper end of this is a bit of iron, *o*, upon the end of an arm or lever, which turns upon a pivot, with a light spring *s* to draw down the right end. Upon the right end of this lever is an upturned point *p*. Now when the wire *a* is closed at *j* to send a current from the battery, *m* will become a magnet and draw down the iron bar *o*, upon *m*, and cause the point *p* to fly up, and puncture the paper *p*, which is moved steadily along by clock-work acting upon the rollers, *r*, *r*. If a short current only is sent, by simply touching the wire at *j* for an instant, a single dot will be punctured in the paper by the point *p*. If a long current be sent by holding the wires together at *j*, the point *p* will be held against the paper, and mark it as it is drawn along by the rollers, *r*, *r*, thus ———. In this manner, just the desired succession of dots and marks will be made by the person working the wire at *j*, though he may be hundreds of miles distant. A series of recording instruments, dispersed along a wire, will all be worked simultaneously by breaking and closing the current at *j*, or at any other place.

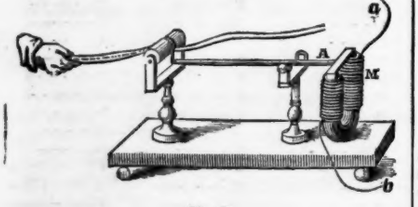


Fig. 7.

Fig. 7 shows the recording instrument on a larger scale with the clock work for moving the paper omitted. Through the wire *a* coming from a distance, and *b* entering the ground, the current of electricity passes around *M*, making a magnet of it for the instant. This draws down the lever *A* and punctures or marks the paper, here moved along by hand.

Telegraphic Wires.

These most of you have seen. In land telegraphs, they are usually carried along on high poles. They are fastened to these by glass, for the electricity will not pass off to the ground through glass. It travels a long way on a copper or an iron wire, rather than attempt to go through glass, or dry wood even; but if there were no glass insulators, it would run down the poles when wet with rain or dew, and hasten back through the earth, to the other side of the battery,

Sometimes it is desirabie to carry wires under ground. If this is done, it is necessary to cover them with glass tubes, or what is more convenient, gutta percha, a kind of gum which prevents the escape of the electricity to the soil. And this brings us to the

Fig. 8.

Atlantic Telegraph.

You have doubtless read, ere this, of the long wire (1950 miles), or rather bundle of wires, which is now stretched along the bottom of the Atlantic Ocean, all the way from Newfoundland to Ireland; and of the fact that two men stand on the opposite shores of the wide and mighty deep, and hold instantaneous converse with each other. You have heard that, quick as thought, a message is sent from New Orleans, or St. Louis, to Newfoundland, thence as quickly to Ireland, thence across an arm of the sea and over England, next across or under the English Channel to France, and away over Europe. But on this wonderful feat, and the grand results to grow out of it, we must not dwell — at least, not now. We will barely stop to show you a cut or two, and describe the Cable that now lies way down on the bottom of the sea, far below the abodes of the fishes, (which, like ourselves, must have access to the air). There, where no living animal has ever gone, or will probably ever go, lies that little cable, through which pulsates the thoughts of two hemispheres.

Figs. 8 and 10 show the full size of the cable with the several different parts of which it is made up. It is scarcely larger than a man's little finger. We laid a five cent piece upon the end of a part of the cable, and it nearly covered it.

Fig. 9.

Fig. 9 shows the end of the cable, and you can measure its size yourself. You will see that it is less than ⅞ of an inch in diameter.

Fig. 10.

Looking in the center of fig. 9, you will see the ends of *seven* little copper wires, *no larger than a small pin*. The same bundle of wires is shown in fig. 10. Seven are used to give greater security against any flaw in a single wire. These are twisted together like the strands of a rope, which fits them for stretching when overstrained. The whole seven conducting wires, put together, are about the size of a large knitting-needle, and through these the entire current of electricity must pass — the rest of the cable being only for protection and insulation.

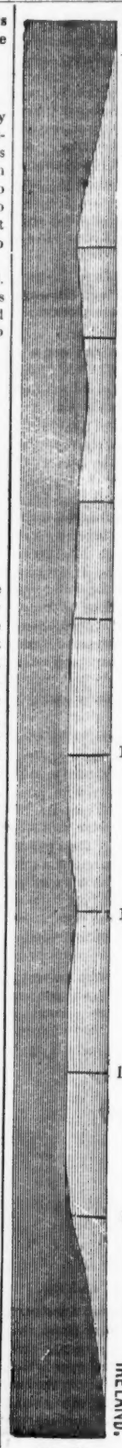


Fig. 11.

Is it not wonderful, that these can be so covered that the current of electricity will follow out their whole length in either direction and return through the earth, instead of striking out at once through the thin coating — not three-eighths of an inch in thickness? But so it is, and the little battery at either end will send its lightning current through the whole 1950 miles in perhaps less than a second of time, and magnetize the iron signal bar at the other end.

Around the conducting copper wire is placed three separate thin coatings of *gutta percha*, forming the core (3) which is only ½ of an inch in diameter. The gutta percha is put on in three coatings instead of one, to avoid flaws or air holes, as no three of these would be likely to occur at the same point. So perfect is the covering, that a current of electricity was sent through 2500 miles of it with a battery made by taking a 22 cent piece, (English Shilling), cutting a slip of zinc of the same size, and putting between them a bit of paper simply moistened with the tongue! One end of the wire touched the shilling and the other the zinc, and a delicate instrument showed that the current went through the whole 2500 miles of wire!

Tarred rope is wound around the core as shown at (2) in fig. 10. Outside of this, *eighteen* strands of iron wire rope are wound spirally. Each of these wire ropes is made up of seven wires, each of them *one-twenty-second* part of an inch in diameter.

We then have 7 conducting copper wires within, and 126 (7 times 18) iron wires as an outer protection, or 133 wires in all; and these run around spirally. If all these wires were straightened out, and joined end to end, they would reach nearly half a million of miles — or nearly twenty times around the earth!

Fig. 11. In this we present a profile of the bed of the Atlantic ocean, along which the cable is laid. The figures along the side, show the depth of the ocean at these points. Thus you will see that near the mid ocean, the water is 12,420 feet deep. As 5,280 feet make a mile, it is here a little over 2¼ miles to the bottom. You can get an idea of this depth by imagining a rope stretched out to a point 2¼ miles from your feet, and then thinking of this rope as let down from a ship. The head almost swims at the thought of the deep body of water it would pass through. But down below this lies the Atlantic Cable.

Get your maps out now, and study the position of the cable which extends from Trinity Bay, Newfoundland, to Valentia Bay on the west coast of Ireland.

Note to Boys and Girls.

In order to make room for the Telegraph, we have left over sundry other interesting things, designed for this department. ☞ We are happy to announce to our young readers, also, that we expect hereafter to have in these columns, the assistance of the renowned "Uncle Frank," known the world over for his scores of interesting books such as "Uncle Frank's Home Stories" "Uncle Frank's Boy's and Girl's Library," "Theodore Thinker's Tales for Little Folks," "The World as It Is," "Stories about Animals," and we know not how many more. With all the previous help, and now "Uncle Frank," and others yet to come in all departments of the paper, will not the *Agriculturist* soon be "a whole team and a horse to let,"

to say nothing of "the little dog running under the wagon?" So bring along all the boys and girls in the land into the Agriculturist Family. The big tent will cover them all, and there will be on the long tables plenty of cakes, sweetmeats, nuts, raisins, and oranges, to supply them all.

Market Review, Weather Notes, &c.

AMERICAN AGRICULTURIST OFFICE,
NEW YORK, Aug. 23, 1858

During a month past, the wholesale Produce Markets have been more active, with an improvement in prices of leading articles, owing to moderate arrivals. The general impression has been that, taking the whole country together, the wheat crop has fallen short of an average yield, and that the oat crop has partially failed. Holders of wheat are, therefore, in no hurry to sell, and speculators are looking out for a further rise. The foreign demand, however, is small. The Flour Inspectors adopted more rigid rules on Aug. 2, which cut off a large amount sent forward as good, and produced a considerable rise in the regularly inspected and branded article....Sound, prime lots of wheat are sparingly offered with an upward tendency, and prices favoring sellers....Corn closes irregularly, with a less plentiful supply of unsound and inferior lots. Good prime lots are in slack demand at languid price. The prospect of the incoming crop is generally very good....Rye is not abundant, with light demand, and prices steady....Barley, very little doing....Oats, sound and sweet, are scarce and much wanted; prices favoring sellers....Cotton, firmer rates recently. The first new bale, received from Texas, Aug. 14, sold at 16¼c. per lb. Our available supply is 33,754 bales against 32,584 same time last year. Total receipts at all shipping ports to latest dates, 3,066,549 bales against 2,905,189 bales to same date last year. Exports so far this year 2,554,869 bales; last year, 2,233,986 bales....Hay, in fair supply and demand at uniform prices....Hemp, quiet at nominal prices....Hops, under recent unfavorable reports from growing districts, have been more sought after by speculators....Rice, in good request for export....Seeds, very lightly dealt in....Tobacco, offered more freely at easier rates, which has attracted attention....Wool has been actively inquired for at firm quotations. ....Provisions have been unsettled. Hog products close heavily; other articles, firmly....Sugars were actively sought after early in the month, at higher rates, but closed quietly....Coffee, Teas, and Molasses lightly dealt in.

CURRENT WHOLESALE PRICES.

	July 23.	Aug 23.
FLOUR—Superf to Extra State	$4 10 @ 4 40	$4 85 @ 5 30
Common to Fancy Western	4 05 @ 4 35	4 85 @ 5 30
Extra Western	4 20 @ 7 00	5 20 @ 8 00
Fancy to Extra Genesee	4 40 @ 6 50	5 40 @ 7 75
Mixed to Extra Southern	4 65 @ 7 50	5 50 @ 8 50
RYE FLOUR—Fine and Super.	3 00 @ 3 60	3 50 @ 4 35
CORN MEAL	3 65 @ 4 25	4 25 @ 4 75
WHEAT—Canada White	1 05 @ 1 18	1 19 @ 1 37½
Western White	1 03 @ 1 30	1 18 @ 1 52
Southern White	1 15 @ 1 43	1 28 @ 1 62½
All kinds of Red	80 @ 1 30	96 @ 1 35
CORN—Yellow	89 @ 95	90 @ 91
White	92 @ 95	85 @ 88
Mixed	67 @ 85	76 @ 88
OATS—Western	46½ @ 47½	51 @ 53
State	45½ @ 46¾	50 @ 52
Southern	32 @ 40	33 @ 41
RYE	69 @ 70	$1 @ 83
BARLEY	55 @ 62½	60 @ 65
White Beans	90 @ 1 15	1 00 @ 1 15
Black-eyed Peas, per 2 bush	3 37½ @ 3 50	none selling
HAY, in bales, per 100 lbs	40 @ 65	40 @ 70
COTTON—Middlings, per lb	12½ @ 12½	12½ @ 13
RICE, per 100 lbs	3 00 @ 3 75	2 87½ @ 3 75
HOPS, per lb	5 @ 7	5½ @ 8
PORK—Mess, per bbl	17 12½ @ 17 25	@17 00
Prime, per bbl	13 95 @14 00	14 80 @14 85
BEEF—Repacked Mess	11 50 @13 50	14 00 @14 50
Country mess	10 75 @11 50	11 75 @12 00
HOGS, Dressed, per lb	5¾ @ 7	5¾ @ 6¾
Lard, in bbls, per lb	11 @ 11¾	11¾ @ 11¾
BUTTER—Western, per lb	11 @ 17	12 @ 18
State, per lb	12 @ 22	14 @ 23
CHEESE, per lb	4 @ 8	4 @ 8
EGGS—Fresh, per dozen	16 @ 17	11½ @ 12½
FEATHERS, Live Geese per lb	44 @ 50	44 @ 50
SEED—Clover, per lb	7¾ @ 8	7¾ @ 9
Timothy, per bushel	1 75 @ 2 00	2 25 @ 2 62½
SUGAR, Brown, per lb	5¾ @ 8⅛	6⅜ @ 9¾
MOLASSES, New-Orleans, prgl	40 @	50 @ 52
COFFEE, Rio, per lb	9¾ @ 11¾	9¾ @ 11⅜
TOBACCO—Kentucky, &c. pr lb	6½ @ 15	6¾ @ 14
Seed Leaf per lb	9 @ 35	6 @ 25
WOOL—Domestic fleece, per lb	27 @ 46	27 @ 46
Domestic, pulled, per lb	25 @ 38	25 @ 38
HEMP—Undr'd Amer'n pr ton	110 @125	105 @125
Dressed American, per ton	170 @185	180 @195
TALLOW, per lb	9½ @	10 @
OIL CAKE, per ton	30 00 @37 50	33 50 @38 00
POTATOES—Mercers, per bbl		2 00 @ 2 25
Long Island, per bush	75 @ 1 00	62 @ 75
Sweet Virginia, per bbl		4 50 @ 5 00
TURNIPS—Rutabagas, per bbl	1 25 @	1 00 @ 1 25
BEETS, per 100 bunches	2 50 @ 3 00	2 00 @ 3 00
ONIONS, per bbl	2 25 @ 2 50	2 25 @ 2 50
CABBAGES, per 100	2 00 @ 5 00	2 00 @ 5 00
LIMA BEANS, per bushel		62 @ 75
CUCUMBERS, per 100		25 @ 50
CORN, per 100 ears		20 @ 40
SQUASHES, Marrow, per bbl		75 @ 1 00
TOMATOES, per bush		25 @ 37
WATERMELONS, per 100		14 00 @16 00
NUTMEG. MELONS, per bbl		2 50 @ 3 00
APPLES—Per bbl	4 00 @ 4 50	2 50 @ 4 50
PEACHES, per basket		1 50 @ 2 50
PLUMS, per bushel		2 00 @ 3 00
BLACKBERRIES, per bush	5 00 @	3 00 @ 3 50
HUCKLEBERRIES, per bush	4 00 @	2 00 @ 2 50
POULTRY—Fowls, per lb	15 @	15 @
Chickens, Spring, per pair	37 @ 63	37 @ 63
Ducks, per pair	62 @ 1 00	62 @ 1 00
Turkeys, per lb	13 @	14 @ 16
Geese, each		1 25 @ 1 50

N. Y. LIVE STOCK MARKET—BEEVES—Receipts for four weeks, ending Aug. 17, 15,758, viz: week ending July 27, (4,950), ¼c. lower; August 3, (3,167), ¼c. higher; Aug. 10, (4,311), ¼c. lower; Aug. 17, (3,350) ¼c, higher. Present prices per lb net weight. First quality, 9c.—9¼c. Medium, 8¼c.—9c; Poor, 6¼c—8c. Average price, 8¼c. @ 8¼c.

SHEEP AND LAMBS—Receipts large, footing up 51,400 for the four weeks just ended. They are now worth 3¼c @ 4c. per lb, live weight, for Sheep, and $2,00 @ $4,00 per head for average lambs.

HOGS—Arrivals have been heavy, amounting to 29,684 for the past month. Prices have declined to 4¼c. @ 5¼c. per lb, live weight, for prime corn feed hogs.

THE WEATHER, for the past four weeks, has been much cooler than the preceding month, but on the whole pleasant, and favorable to growing crops. *Our Weather Notes*, condensed, read: July 24 to 29, clear and fine, (somewhat cool on 25, 26, 27); 30, clear A. M., heavy shower, P. M.; 31, clear and warm. August 1, fine; 2, moderate rain during day; 3, cloudy, with heavy rain at night and next morning; 5, fog A. M., clear and warm P. M.; 6 to 11, clear, fine, and moderately warm; 12, clear A. M., rain P. M.; 18, clear and hot; 19 and 20, clear but quite cool; 21, 22, clear and warmer; 23, clear and cool.

Agricultural Exhibitions for 1858.

[The following list of fairs is *in addition* to those published last month. We intended to give the whole in this place, but our regular subscribers have the others on hand, and being unexpectedly crowded for room, we insert only those not before reported. Persons desiring all the fairs will need both the August and September numbers, or they will find the whole in the German edition for September, where we chanced to have room for them all.]

STATE.

Place.	*Where held*	*Date*
Amer. Pomol. Soc	New-York	Sept. 14—16
Georgia, (S. Central)	Atlanta	Oct. 10—13
Tennessee	Nashville	" 11—16
Maryland	Baltimore	" 19—24
Mississippi	Jackson	Nov. 9—12

COUNTY FAIRS.

CONNECTICUT.			
New-London	Norwich	Sept.	22—24
Fairfield	Danbury	"	21—24
Litchfield	Litchfield	"	22—23
Windham	Brooklyn	Sept. 24	Oct. 1
Middlesex	Middletown	Oct.	6— 8
INDIANA.			
Morgan	Centreton	Sept.	8—11
Shelby	Shelbyville	"	7—10
Kosciusko	Warsaw	"	13—15
Montgomery	Crawfordsville	"	15—17
Boone	Lebanon	"	16—17
Southwestern	Vincennes	"	19—22
Howard	Kokoma	"	21—22
Jefferson	Madison	"	22—23
Owen	Spencer	"	22—24
Henry	Newcastle	"	22—24
Wabash	Wabash	"	28—30
Ohio & Switzerland	Enterprize	"	28—30
Scott	Lexington	"	28—30
Sullivan	Carlisle	" 30	Oct. 1
Greene	Bloomfield	Oct.	13—15
Blackford	Hartford City	"	14—16
Fulton	Rochester	"	15—16
Southwestern	Vincennes	"	19—22
Howard	Kokoma	"	21—22
ILLINOIS.			
McLean	Bloomington	Sept.	2— 4
Macon	Decatur	"	7—10
Henry	Cambridge	"	8— 9
Rock Island	Rock Island	"	8— 9
Union	Jonesboro	"	10—11
Lee	Amboy	"	14—17
Champaign	Urbana	"	21—
Peoria	Peoria	"	21—24
Scott	Winchester	"	22—24
Winnebago	Rockford	"	21—24
Kane	Geneva	"	23—24
Hancock	Carthage	"	23—25
La Salle	Ottawa	"	28—30
Mercer	Millersburg	"	28—30
Du Page	Wheaton	"	28—30
Will	Joliett	"	28—30
Carroll	Mount Carroll	Sept. 29	Oct. 1
Mason	Havana	" 29	" 1
Warsaw	Warsaw	" 29	" 1
Lake	Libertyville	Oct.	5— 6
Livingston	Pontiac	"	6 —7
Kankakee	Kankakee	"	6— 8
Stephenson	Freeport	"	6— 8
MAINE.			
Somerset	Skowhegan	Sept.	28—30
East Somerset	Hartland	Oct.	6— 7
Hancock	Ellsworth	"	12—13
Kennebec	Readfield	"	12—14
South Kennebec	Gardiner	"	12—14
Lincoln	Jefferson	"	12—14
MICHIGAN.			
Northern Lenawee	Tecumseh	Sept.	—16
Ottoway	Eastmanville	"	22—23
Kalamazoo	Kalamazoo	"	22—24
Eaton	Charlotte	"	28—30
St. Joseph	Centreville	"	29—30
Kent	Grand Rapids	Oct.	5— 7
Calhoun	Marshall	"	5— 7
Berian	Niles	"	6— 7
Lenawee	Adrian	"	6— 7
Genessee	Flint	"	6— 7
Jackson	Jackson	"	6— 8
Oakland	Pontiac	"	6— 8
Barry	Hastings	"	13—14
Clinton	St. Johns	"	13—14
NEW-YORK.			
Jefferson (Union)	Adams	Sept.	15—16
St. Lawrence	Canton	"	15—17
Lodi	Lodi	"	15—17
Lewis	Turin	"	16—17
Albany	Albany	"	21—24
Chautauque	Fredonia	"	21—22
Dutchess	Washington Hollow	"	21—23
Delaware	Franklin	"	22—23
Tonawanda Valley	Attica	"	22—23
Yates	Penn Yann	"	23—24
Yates	Yates Centre	"	24—25
Brookfield	Clarksville	"	27—28
Schuyler	Watkins	"	28—29
Wyoming	Warsaw	"	28—30
Niagara	Lockport	"	28—30
Orleans	Albion	"	29—30
Dryden	Dryden	" 30	Oct. 1
OHIO.			
Clinton	Wilmington	Sept.	22—24
Darke	Greenville	"	22—24
Hocking	Logan	"	29—30
Montgomery	Dayton	" 29	Oct. 1
Muskingum	Zanesville	" 29	" 1
Miami	Troy	" 29	" 1
Wayne	Wooster	" 29	" 1
Logan	Bellefontaine	Oct.	5— 8
Holmes	Millersburg	"	12—14
VIRGINIA.			
Lowdoun	Leesburg	Oct	19—20
Valley	Winchester	"	19—22

For other Fairs see page 288.

☞ **The actual circulation of the Agriculturist to regular subscribers, is believed to be much larger than that of any other Agricultural or Horticultural Journal in the world.**

Advertisements.

Advertisements to be sure of insertion must be received at latest by the 18th of the preceding month.

TERMS—(invariably cash before insertion):

FOR THE ENGLISH EDITION ONLY.

Twenty-five cents per line of *space* for each insertion. About 9 words make a line, if undisplayed.
One whole column (145 lines) or more, $30 per column.
☞ Business Notices *Fifty* cents per line.

FOR THE GERMAN EDITION ONLY.

Ten cents per line of *space* for each insertion.
One whole column, (130 lines), or more, $11 per column.
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FOR BOTH EDITIONS—ENGLISH AND GERMAN.

Thirty-one cents per line; $38 per column.
☞ Business Notices *Sixty-five* cents per line.

SHEPHERD WANTED—One who thoroughly understands his business—to go to Texas. A single man desired. To the right kind of man a liberal salary will be paid. Call upon or address WM. H. SELLERS, 175 Pearl-st., New-York.

HOME IN THE COUNTRY.—Wanted a situation with a practical farmer within 50 miles of New-York, for a boy 13 years of age, where he can make himself generally useful and at the same time have the benefit of country air and diet. Address or call upon J. McNICOL, 33 W. Washington Place, New-York.

$500 to $2,000 a Year!
A CHANCE TO MAKE MONEY AND DO GOOD!
More than a Hundred kinds of Popular Books for the People.
BOOK AGENTS, COLPORTEURS AND CANVASSERS can be sure of pleasant and profitable business by engaging in the sale of our publications. They are all good books, well printed, well bound, and very popular. Scarcely a family in the country but would be glad to buy one or more of them, when brought to their door.
From $5 to $10 per day can be cleared where perseverance, industry and skill are exercised.
Those desiring Agencies will, for particulars, address C. M. SAXTON, 25 Park Row, New-York.

PROFITABLE Employment may be had by addressing (post-paid) R. SEARS, 161 William-st, N. Y.

GREAT NATIONAL WORK—FRANK FORESTER'S HORSE AND HORSEMANSHIP OF AMERICA. Agents wanted for this and other valuable works. Address E. D. BARKER, 348 Broadway, New Y-ork

1842. THE FLUSHING FEMALE COLLEGE, at Flushing, L. I., has just closed its Sixteenth year. It will re-open on the second Monday (13th) of September. For circulars address the President. Rev. W. H. GILDER.

CAUTION.

All persons are hereby cautioned against using, making or vending any machines in violation of CHAS. W CAHOON'S Patent for SOWING SEED and GRAIN BROADCAST, issued Sept. 1st, A. D. 1857, and re-issued on the 11th day of May last. Suits have already been commenced against A. Leach the assignee of Aaron Ring, for using and selling machines under the Ring patent; and also against the manufacturer of the Ring Machines. And any person who shall hereafter be found using or vending any of the Ring Machines, or in any way violating said Cahoon's patent, will be prosecuted immediately.
June 1, 1858. D. H. FURBISH, Proprietor.

D. H. FURBISH, Esq. BOSTON, May 21, 1858.
Dear Sir:—I have examined with care the model of a broadcast sower, deposited in the Patent Office by Aaron Ring, and am clearly of the opinion that machines made according to that model would be infringements of the Letters-Patent re-issued to the assignees of Charles W. Cahoon, on the 11th of May instant. Yours respectfully, GEORGE T. CURTIS.

D. H. FURBISH, Esq PORTLAND, June 1, 1858.
Dear Sir:—Having seen the machine of Aaron Ring in operation, I entertain no doubt of its being an infringement of the patent issued to C. W. Cahoon's assignees. Yours truly, EDWARD FOX.

PERKINS' Corn Husking Machine. $5 50. Agents wanted to solicit orders in every Town and County. Terms usually liberal. Address J. PERKINS & CO., West Killingby, Conn.

PARSONS & CO., Flushing, N. Y., near New-York City.

Nurseries of Fruit and Ornamental Trees and Shrubs, Vines and Roses, Green-house and Stove Plants, Exotic Grapes, &c.

Country Homes.

Intelligent men, who know what constitutes a true social life, who value their own enjoyment, or who have children whose physical and moral health are to them of more importance than everything else, are rapidly coming to the conclusion that these are to be obtained more thoroughly in the country than in the city. Those who are compelled to study economy are becoming convinced that the country is the *cheapest* place to live in; and the suburbs of villages which are near the city are thus rapidly filling up.

This applies particularly to villages like FLUSHING, on Long Island, less than an hour's railroad ride from New-York, where epidemics rarely prevail, where children are robust and healthy, where the country is highly cultivated, abounding in pleasant walks and drives, and where numerous Schools aid the parent in the education of his children. [See end of first column, next page.]

To all who settle in such localities, whether with ample or moderate incomes, every item of information is welcome which may enable them to cultivate their grounds, grow trees and flowering plants, and surround themselves with every thing in nature which can make a home attractive and enjoyable.

After building the house, which should be done with regard to comfort more than show, the first thing is to prepare the LAWN. But of this we have not room to speak here. Directions for forming it we will gladly furnish. The next object which should receive attention is the

FRUIT GARDEN,

in which should always be found the following plants, while the possessor of large grounds can increase the list at his pleasure. Throughout this article the *prices* will be given, in order that the planter may form accurately his estimate of expense, bearing in mind that the prices are for moderate sized trees, that large trees for immediate effect always command an extra price; and that there is a slight additional charge to cover the cost of material for packing. In naming the following as well adapted to a limited space, the Proprietors wish it clearly understood that the kinds enumerated throughout the advertisement, are but a very *small proportion* of the varieties contained in their collection, and detailed in their Catalogue, which can be obtained as stated below.

ASPARAGUS..... 75 cents per 100 plants.
RHUBARB.—Linnæus..... 35 cents each.

CURRANTS.—Per Dozen.

Red Dutch	$1 25	Black Grape	1.50
White Dutch	1 25	Cherry	2.50

GOOSEBERRIES.—Per Dozen.

Houghton's Seedling	1.50	Large English sorts	1.50

RASPBERRIES.—Per Dozen.

Red Antwerp	1 00	Knevett's Giant	1.50
Fastolff	1.00	Brinckle's Orange	2.00

BLACKBERRY.—New Rochelle..... 1.50 per dozen.

STRAWBERRIES.—25 cents per Dozen.

Burr's New Pine.	McAvoy Superior.
Early Scarlet.	Jenney's Seedling.
Hovey's Seedling.	

GRAPE VINES.—Each.

Isabella	0 35	Concord	1.00
Catawba	0.35	Diana	1 00

DWARF WALNUT TREES..... 25 cents each.
FILBERT Do. ..... 25 cents each.
FIG Do. ..... 25 cents each.

The next object to receive attention should be the

Orchard.

in which the following selection, from a large variety, is well adapted to a limited space :—

APPLES.—25 cents each.

Early Bough.	Rhode Island Greening.
Early Harvest.	Fameuse.
Red Astrachan.	Porter.
Summer Rose.	Baldwin.
Autumn Bough.	Boston Russett.
Gravenstein.	Newtown Pippin.
Fall Pippin.	Danver's Winter Sweet.
Northern Spy.	Yellow Bellflower.

PEARS.—50 cents each.

Madeleine.	Louise Bonne.
Bartlett.	Seckel.
Urbaniste.	Buffum.
Beurre d'Anjou	Lawrence.
Beurre Diel.	Duchesse d'Angouleme.
Fondante d'Automne.	Vicar of Winkfield.

CHERRIES.—50 cents each.

Black Eagle.	Governor Wood.
Black Tartarian.	Mayduke.
The Bigarreau.	Early Richmond.
Downer's Late Red	Arden's Whiteheart.

Of apples, pears, and cherries, *standards* should be planted twenty feet apart, and *dwarfs*, ten feet. The dwarfs are best adapted to garden culture.

PLUMS.—50 cents each.

Coe's Golden Drop.	Lawrence Favorite.
Smith's Orleans.	Golden Gage.
Yellow Gage.	Washington.
Reine Claude de Bavay	Lombard.

PEACHES.—25 cents each—large reduction by the 100.

Large Early York.	Old Mixon Cling.
Old Mixon Free.	Golden Rareripe.
Cooledge's Favorite.	George IVth.
Stump of the World.	Crawford's Early.
Fox Seedling.	Crawford's Late.
Heath Cling.	Heath Free.

NECTARINES.—35 cents each.

Early Violet,	Boston.
Elruge.	Stanwick from Syria.

APRICOTS.—35 cents each.

Early Peach.	Moorpark.
Large Early.	Bienheim.

QUINCES.—Orange..... 25 cents each.
MULBERRIES..... 25 cents each.
MADEIRA NUT..... 50 cents each.
PECAN NUT..... 25 cents each.

Before planting an Orchard the ground should be cultivated at least one year with root crops, having been spread with stable manure at the rate of 1500 bushels to the acre. Where it is possible the soil should be double trenched, keeping the black earth on the top. Where this is too expensive, plowing to the depth of 18 inches is indispensable.

A provision for the *palate* of the family having thus been made, equal care should be entertained for their pleasure and comfort. Nothing external will more conduce to this than a smooth green turf, and

Trees, Shrubs and Flowers.

If the ground is prepared the trees can very properly be planted before the building of the house or preparing the lawn, but such a plan is not always convenient.

The taste of the owner also is generally better developed after the erection of the house. According to the capability of the grounds, these may be planted, singly or in groups,

ORNAMENTAL TREES.

Of these the following are the finest, although the list can be profitably enlarged in proportion to the extent of the grounds.

The outside lines of the Lawn should first be planted with a thick belt of Evergreens ten feet apart. A back ground being thus formed, other trees can be embroidered upon it to suit the taste of the owner. For this purpose the most satisfactory tree under all circumstances is the

NORWAY SPRUCE.

This can be furnished at prices ranging from ten cents to a dollar each, according to the object desired by the planter. Many plant the belt very thickly with trees worth only $20 per 100, and when they grow crowded transplant them to other parts of the lawn. This gives a thick belt very soon. Other good *Evergreens* for grouping or planting singly are the following :—In grouping, Evergreen and Deciduous Trees should never be planted together, and strong contrasts in the color of foliage always produce the finest effect.

	Each.		Each.
White Pine	0.75	Atlas Cedar	2.00
Austrian Pine	0.75	Balsam Fir	0.50
Bhotan Pine	1.50	Silver Fir	1.00
White Spruce	0.75	Scotch Fir	0.75
Hemlock Spruce	1.00	Arbor Vitæ	0 50
Himlayan	1.00		

Of the large DECIDUOUS TREES the following can be recommended :—

	Each.		Each.
Sycamore Maple	0.50	Linden	0.50
Sugar Maple	0.50	Larch	0.50
Norway Maple	0 50	Ash in variety	0.50
Silver Maple	0.50	Beech, European	0.50
Tulip Tree	0.50	Beech, Purple	1.00
Oriental Plane	0.50	Liquidambar	0.50
Elm American	0.50	Cypress, Deciduous	0 50
Oak, American	0.50	Weeping Willows	0.50
Elm, English	0.50	Oak, English	0.50

The first eight of the above, if of a size commanding a dollar or more, are very suitable for avenues.

Deciduous trees of a *lower* growth include among the best

	Each.		Each.
Mountain Ash	0.50	Silver Bell	0 25
Paulownia	0.75	Catalpa	0 50
Kentucky Coffee	0.50	Magnolia Glauca	0 50
Laburnums	0.50	" Tripetala	0.50
White Fringe	0.50	" Acuminata	0.50
Purple	0.50	" Macrophylla	2 00
Ash Leaf Maple	0.50	" Chinese	2.00

The prices attached to the ornamental trees are for those of moderate size. Where purchasers wish a larger size for immediate effect, they should name the price they are willing to pay.

EVERGREEN SHRUBS.

For undergrowth and massing, as well as planting singly, the following selection of SHRUBS may be safely made. For massing, nothing whatever can compare with the Rhododendron. Its evergreen foliage is very beautiful in winter, and its flowers are more gorgeous than those of any other shrub.

The Catawbiense, with its varieties, is the only desirable species which is perfectly hardy.

	Each.		Each.
Rhododendron Catawbiense	0.75	Dwarf Pine	0.75
do. grafted varieties	2.00	Kalmia	0.75
Tree Box	0 50	Cotoneaster	0 50
Evergreen Thorn	0.50	Irish Juniper	0 75
Andromeda Floribunda	1.00	Swedish Juniper	0.75
Golden Arbor Vitæ	1.00	Siberian Arbor Vitæ	0.75
Siberian Stone Pine	1.00		

The last three con be particularly recommended. The Siberian Arbor Vitæ makes the finest hedge known.

The Rhododendron and Ghent Azaleas should be planted in a soil of which half is peat.

DECIDUOUS SHRUBS.

	Each.		Each.
Ghent Azaleas, many sorts	1.00	Buffalo Berry	0 25
Dertzia Gracilis	0.50	Oak Leaf Hydranges	0.50
" Scubia	0.25	Lilac of sorts	0.25
Spiræa Reevesii	0.35	Weigelia Rosea	0.35
" " double	0 50	Forsythia	0.35
" Prunifolia	0.50	Euonymus	0.25
" Callosa	0.50	Altheas of sorts	0.35
" many others	0.25	Philadelphus	0.25
Red Flowering Currant	0.50	Pyrus Japonica	0.50
Indigo Shrub	0.25	Clethra	0.25
Bladder Senna	0 25	Upright Honeysuckles	0.25
Mahonia	0 25	Indigofera	0.50
Berberry, Purple	0.25	Tamarix	0.25
Sweet Scented Shrub	0.25	Snowball	0.25
Daphne Mezereon	0.25		

VINES

For training on verandahs, covering old trees, making tree umbrellas, &c.

	Each		Each.
Clematis Flammula & others	25	Ivy	0.25
" Sieboldii	0.50	Chinese Glycine	0.50
" Helene	0.50	White Glycine	1.00
" Sophia	0.50	Trumpet Creeper	0.25
" Lanuginosa	0.75	" Chinese do. & others	0.50
Honeysuckles of sorts	0.50		
" Standishii & others	0.35		

FOR HEDGE PLANTS

The best are—

American Arbor Vitæ	$20 to $40 per 100
Osage Orange	10 per 1000
Buckthorn	12 per 1000

PÆONIES.

Tree Pæony	1.50 each
" varieties	1.50 to 3.00 "
Herbaceous of sorts	0.50 "

ROSES.

No flower will give so much pleasure as the Rose; beautiful in its bud, beautiful in its expanded bloom, beautiful on a single bush, in groups and masses, in the conservatory of the rich, or in the window of the poor, it possesses a charm superior to those of any other flower They are cultivated by PARSONS & Co. in very large quantities, and of the finest varieties only, of which they have nearly 400 choice kinds in growth. All particulars respecting their cultivation will be found in "Parsons on the Rose,"—a standard Work, to be obtained of Wiley and Halsted, or any of the booksellers in New York.

Of those which bloom more than once in the season, the CHINA, TEA, and BOURBON varieties, though exceedingly valuable, require protection in the winter.

The REMONTANTS are perfectly hardy and have several distinct periods of bloom during the year. This, therefore, is the best class of Roses for general use.

Those which bloom only once in the year, such as Garden Roses, Moss Roses, &c., are generally hardy.

A few of the *best* of each class are named below. Where a quantity is wanted, and the selection from this list is left to the Proprietors, they will be furnished by the hundred at the following rates, which do not apply to any quantity less than a hundred :—

Remontants Tea, and China, $25 per 100.
Bourbon, Moss, and Other classes. $30 per 100.

The kinds thus selected by the proprietors will not be of inferior quality, but those which are cultivated in larger quantities on account of their excellence.

REMONTANT.

Adele Mauze	0.75	Geant des Batailles	0.31
Amandine	1.00	Josaine Hanet	0.38
Augustine Mee	1 00	Louis Odier	1 00
Baronne Prevost	0.50	Pius IX	0.75
Dr. Arnal	1.00	Sydonie	0.50

BOURBON.—50 cents each, except those noted.

Appoline	1.00
Bouquet de Flore.	Madam Margat.
Cardinal Fesch.	Mrs. Bosanquet.
Henri Plantier.	Queen of Bourbons.
Imperatrice Josephine.	Souvenir de la Malmaison.

CHINA, TEA, AND NOISETTE.—35 cents each.

Antoinette Bouvaze.	Louis Philippe.
Arch'ess Therese Isabelle.	Leon Felize Bigot
Devoniensis	Nemesis.
Eugene Beauharnais.	Ophir.
Feilenberg.	Pactole.
La Charmante.	Safrano.
Lady Warrender.	Solfaterre.
Lamarque.	Triomphe du Luxembourg

JUNE ROSES.—All 50 cents each.

GARDEN.

Baron Cuvier.	Hortensia.
Boula de Nanteuil.	La Calaisienne.
Capitaine Sisolet.	Œillet Parfait.
Chenedole.	Queen of Summer.
Comtesse Mole.	Rien ne me surpasse
Coupe d'Hebe.	Schismaker.
Duc de Trevisse.	Sophie de Marsilly
Duke of Sussex.	Tibulle.
Duke of Cambridge.	Tricolor.
Fulgens.	York and Lancaster.
Grandissimma.	

MOSS.

Alice Leroy.	Luxembourg.
Crimson.	Perpetual White
Cristata.	Princesse Adelaide.
Hooker's Blush.	

CLIMBING.

Baltimore Belle.	Perpetual Pink.
Milledgeville Prairie.	Queen of the Prairies.
Miss Gunnell.	Virginia Lass.

Greenhouse Department.

NINE HOUSES.

Greenhouses are generally thought to be within the reach of the rich only. They can, however, be erected at very moderate prices, and one costing only $200 would hold many plants.

Visitors are invited to examine the houses which are stocked with blooming and sale plants, and will always give pleasure.

They are mostly 20 feet wide and 100 feet long.

No 1.—Is devoted to the fruiting of Exotic Grapes, in order the

GREEN-HOUSE DEPARTMENT CONTINUED.

there may be no error in the varities which they cultivate in pots.

No. 2.—Is devoted exclusively to Camellias, which are cultivated in large quantities.

No. 3.—Is devoted partly to Camellias, and partly to Azaleas and other Greenhouse plants.

No. 4.—To Heaths and other plants.

No. 5.—To Orchideous and Stove plants.

No. 6.—To large specimen plants.

No. 7.—To propagation.

No. 8.—To Roses and bedding plants.

No. 9.—To general stock.

EXOTIC GRAPES.

The following are the best sorts for culture under glass:—

1 year old, 50 cents each; 2 do., 75 cents each; extra strong, $1.

Black Hamburg.	Pizamed Tokay.
Black Prince.	White Sweetwater.
Golden Chasselas.	Constantia of Zante.
Grizzly Frontignan.	Red Chasselas.
Royal Muscadine.	Xeres.
Muscat of Alexandria.	Zinfändel.

GREENHOUSE PLANTS.

Below will be found a selection of some of the best varieties, some of which are suitable for window culture, some for cheap houses, and others for stores and conservatories.

Abutilon Van Houttii	.25 to 1.00	Echites picta	1.00
" insigne	0.50	" nutans	1.00
Acacia armata	.0.25 to 1 00	" Russellianum elegans	1.00
" intermedia	.0.25 to 1.00	" truncatum spectabile	1.00
" cultriformis	1.00	Erythrina caffri	0.50
" longinima	0.60	Euphorbia sanguines	0.50
" grandis	0.50	Francisca gracilis	0.50
" Roi Leopold	1.00	" confertiflora	0.50
" squarrosa citrina	0.38	" angusta	0.75
Andisia crenulata	0.50 to 3.00	Fuchsia Duchesse of Lan-	
Azalea Interitia	.0.38 to 3.00	caster	0.50
" ninso plena	.0.50 to 3.00	" Honeybell	0.50
" Gledstanerii	1.00	" Commodore	0.50
" wirzana	1.00	" Mrs. Taite	0.50
" amœne	1.00	" Psyche	0.50
" vittata	1.00	" Ajax	0.50
" Beauty of Europe	1.00	" Empress	0.50
" Narcissæflora	1.00	" Joan of Arc	0.50
" Stanlysna	1 00	" Glory	0.50
" rameutacea	1 00	" Lady Franklin	0.50
Bouvardya longiflora	0.50	" Incomparable (Mayle,)	0.50
Brunsvigea Josephina	1.00	" Queen Victoria	1.00
Camellia alba plena	0.75	Gardenia Devoniensis	0.50
" candidissima	0.75	" Whitfieldii	1.00
" Chandleri	1.00	" Fortuni	0.50
" Duchess of Orleans	0.75	Genista fragrans	0.50
" Floridà	1.00	Gloxinia Imperialis	1.00
" Feastii	1.00	" Wilsonii	1.00
" Hempsteadi	0.75	" Nobilis	1.00
" Henri Favre	1.00	" Leonie Van Houtte	1.00
" Jeffersonii	1.00	" Grand Sultan	1.00
" Mrs. Abby Wilder	1.00	Grevillea Tillermanii	0.50
" Princesse Bahchiochi	1.00	" Sternbergii	0.50
" Wilderii	1.00	" sulphurea	0.50
Campylobotrys discolor	0.50	" lavendulacea	0.50
Cineraria Lady Hume Camp-		Hoya imperialis	2.00
" bell	0.50	" picta	3.00
" Rosy morn	0.75	Hydrangea Japonica	0.38
" Resplendant	0.50	Ixora coccinea superba	1.00
" Advancer	0.50	" crocata	0.50
" Lady Camoys	0.50	" Javanica	1.00
" Estella	0.50	Lilium longiflorum	0.50
Cissus discolor	0.50	" lancifolium album	1.00
Clerodendron fallax	0.50	" punctatum	1.00
" Bungeii	0 50	" rubrum	1.00
" Clethra arborea	0.50	" speciosum	1.00
Clivia nobilis	1.00	Medinella, erythrophylla	0.50
Correa Cavendishii	0.75	" speciosa	0.50
" speciosa	0.50	Musa Cavendishii	2.00
" Lindleyana	1.50	" dacca	2.00
" brilliant	1.00	Pimelia spectabile	1.00
" delicata	0.50	Rhopala elegans	0.50
Croton pictum	0.75	Rojiera amœna	0.50
Cyclamen Persicum	0.25	" cordata	0.75
Daphne odora	0.50	Rondolet a speciosa	0.50
" rubra	1.00	Stephanotus floribundus	1.00
Dielytra spectabilis	0.50	Thyrsacanthus lilacina	0.75
Diplacus grandiflorus	1.00	" rutilans	0 50
Diplodenia crassinoda	1.00	Tremandra verticillata	0.75
Dracœna terminalis	1.00	Viburnum odoratissimum	1.00
" nobilis	1 00	" suspensum	0.50

Our collection embraces the finest new Pelargoniums and all the choicest bedding plants, such as Geraniums, Chrysanthemums, Verbenas, Phloxes, Gladiolus, Amaryllis, Petunias, Heliotropes, Salvias, &c. No lawn is at all, complete which has not its surface variegated with some of the many brilliant bedding plants now cultivated.

It is scarcely proper for the Proprietors to speak of their mode of dealing; they leave that to those who know them. They will simply say, that they do not trust their sales to irresponsible men, whose only object is to make large commissions, irrespective of the interest of the purchaser or the reputation of the proprietors. Reputation and character are of more value in their eyes than money. The first two they wish to secure by air and liberal dealing—the last must take care of itself.

TRANSPLANTING

Is carefully done at the Nursery, but as the planting is often improperly done by the purchaser, and the trees consequently die, it is expressly understood that the proprietors do not ensure the living of any trees. Directions for transplanting will be found on the cover of their catalogue.

It will be born in mind that the varieties given above are but a small part of the catalogue, which can be obtained on application, as below.

Where very large quantities are wanted by dealers, or others, a liberal discount will be made.

SMALL TREES CAN BE FURNISHED AT HALF THE ABOVE PRICES.

TERMS CASH.

For packing, a charge will be made simply covering cost, and the trees will be delivered at Fulton Market (New York City) free of freight.

Priced and detailed catalogues will be furnished on the grounds, or at the office of the Bridgeport Insurance Company, 34 Wall street, New-York City.

FACILITIES OF COMMUNICATION WITH NEW-YORK.

Visitors can reach Flushing from Fulton Market slip, New-York, by boat and railroad six times per day. Time of transit, 50 minutes; leaving both New-York and Flushing at 8, 10, 1, 4, and 5½ o'clock

FRUIT TREES!

FOR AUTUMN OF 1858.

ELLWANGER & BARRY solicit the attention of Planters, Nurserymen and Dealers in Trees to their present stock which has never been equaled in extent, nor surpassed in vigor, health, and beauty of growth. In its propagation and culture the utmost care has been taken to insure accuracy.

APPLES on free stock for orchards, 2 to 4 yrs from bud and graft.
do on Paradise and Doucain stock for gardens, 2 to 3 yrs.
PEARS on Pear stock, 2 to 3 years from bud.
do. on Quince stock, 2 years from bud.
do. on Quince stock, 3 to 4 years, with fruit buds.
CHERRIES on Mazzard stocks, 2 years from bud.
do on Mahaleb stocks, 2 years from bud.
QUINCES, Orange, Portugal and Rea's Seedling, a superb new variety.
ENGLISH FILBERTS.
SPANISH CHESTNUTS.
GRAPES, Foreign for culture under glass, strong, well ripened plants in pots of all the best varieties.
BLACKBERRIES, New-Rochelle, or Lawton and Dorchester, (the largest stock in existence.)
RASPBERRIES, a general collection, including those fine new everbearing sorts, "*Belle de Fontenay*" and "*Merveille de quatre Saisons*."
GOOSEBERRIES, the best English sorts, and an immense stock of the *American Seedling* that bears most profusely and never mildews
CURRANTS, White Grape, Cherry, Victoria, Black Naples, and many other old and new sorts.
RHUBARB, including Linnæus, Prince Albert, Giant, Victoria, and many others.

All who are interested are respectfully invited to examine the stock and prices. The following Catalogues are sent gratis, prepaid, to all who apply and inclose one stamp for each.

No. 1—Descriptive Catalogue of Fruits.
No. 2—Descriptive Catalogue of Ornamental Trees, &c.
No. 3—Descriptive Catalogue of Greenhouse & Bedding out plants.
No 4—Wholesale or Trade List.

☞ See advertisement of Ornamental Trees, Bulbs, &c.

ELLWANGER & BARRY,
Mount Hope Nurseries, Rochester, N. Y.

A FROST & CO.,

Genesee Valley Nurseries,

ROCHESTER, N. Y.,

Have published their Wholesale Catalogue, No. 4, of Fruit, Ornamental Trees, Plants, &c., containing prices for the Autumn of 1858.

All those parties who wish to purchase largely, will consult their interest by examining this Catalogue. It is sent *free* to all applicants, by inclosing a stamp.

Stephen Hoyt & Sons,

NEW-CANAAN, CT.

Offer for sale a large and choice stock of Fruit and Ornamental trees

Comprising 40,000 apple trees 3 and 4 years from the bud.
50,000 peach trees 1 year " "
Pear, Cherry, Plum, Apricot and Quince trees.
Currant, Gooseberry, Raspberry and Blackberry plants.
Horse Chestnut, Mountain Ash, Larch, Tulip, Black Walnut, Silver, Sugar and Norway Maples.
20,000 Norway Spruce from 1 to 5 feet high.
20,000 American Arbor Vitæ from 1 to 6 feet high.
Balsam Fir, Pine, Hemlock, &c., &c.
100,000 Sugar Maples, seedlings one year old.
100,000 American Elm, &c.
August, 1858.

New-Brunswick, N. J., Nurseries.

EDWIN ALLEN, invites attention to his large stock of Trees and Plants now for sale—all of which are grown under his personal care and can be relied upon as genuine and true to name.

His stock of Apple, Pear, Cherry and Plum is large, and, being budded upon seedling stocks, possesses a beauty of growth seldom equaled, and comprises the best sorts in cultivation.

The Strawberries comprise Burr's New Pine, Hovey's Seedling, Scarlet Magnate, (Prince's,) McAvoy's Superior, Large Early Scarlet, Marylandica, Walker's Seedling, &c. Also Linnæus Rhubarb; Giant Asparagus; Grape Vines; &c., &c.

A descriptive *low priced* Catalogue will be mailed gratis by addressing as above.

Fruit and Ornamental Trees for Sale.

The subscriber would call attention the coming season to his large stock of Peach and other fruit trees, embracing Apple, Pear and Cherry, both Dwarf and Standard, of extra and medium sizes. Also Apricots, Almonds Plums, Quinces, &c., with a large stock of Evergreen and Deciduous trees suitable for ornamenting grounds, at reasonable prices; and 50,000 one year's growth Silver Maple seedlings, and other Nursery stock.

Catalogues or Trade List, with prices annexed, will be sent to all who inclose a one-cent stamp for each.

Address ISAAC PULLEN,
Sept. 1st, 1858. Hightstown, Mercer Co., N. J.

Cherry Stones, Tree Seeds, &c.

The subscriber's stock of mazzard pits, are now to hand in the best condition for germination. $7 per bushel. Preserved in sand from select trees, $10 per bushel. Dealers and Nurserymen ordering largely at reduced rates.

A Catalogue of 200 kinds tree seeds on application.

A very large stock of OSAGE ORANGE, ASPARAGUS ROOTS, &c., at low rates.

The Nursery contains one of the finest collections of trees in the Country. Catalogues gratis.

THOMAS MEEHAN,
Germantown Nurseries,
near Philadelphia, Pa.

To Nurserymen.

We beg to announce to the trade that we can supply the following stocks of healthy and vigorous growth:

PEAR SEEDLINGS 2 years. (1 year transplanted, fine.)
do do 1 year from seed bed.
MAZZARD CHERRY 1 year, very strong.
MAHALEB do 2 years. (1 year transplanted, fine.)
do do 1 year from seed bed.
QUINCE STOCKS, Angers and Fontenay. 1 year from cuttings.
MANETTI Rose stocks.
COMEWELL WILLOW for the Weeping sorts.
Priced Lists sent on application
See other advertisements.

ELLWANGER & BARRY,
Mount Hope Nurseries, Rochester, N. Y.

Genesee Valley Nurseries.

FRUIT TREES, ORNAMENTAL TREES, SHRUBS, ROSES, &c., &c.

THE Proprietors of these well known and extensive Nurseries have on hand a large and well-grown stock of

FRUIT TREES, ORNAMENTAL TREES, SHRUBS, ROSES, GREEN-HOUSE and BEDDING PLANTS, DAHLIAS, PHLOXES and other HARDY BORDER PLANTS.

The assortment of ROSES is very extensive, and embraces all varieties which could be obtained and which are considered worthy of cultivation. Our collection of HYBRID PERPETUALS is the most complete in the country.

The GREEN HOUSE DEPARTMENT receives particular attention, and the stock of Fuchsias, Geraniums, and other Green-House Plants, is large and varied. In the

FRUIT DEPARTMENT,

our stock consists of

APPLES, of the leading varieties, Dwarf and Standard.
PEARS, of all desirable varieties, on Quince and Pear stock.
PLUMS—A choice selection of well-grown trees of popular sorts.
CHERRIES—All the popular sorts, Dwarf and Standard.
PEACHES—A choice assortment.
NECTARINES, APRICOTS and QUINCES, in variety.
GRAPES—A complete assortment of both native and foreign sorts, including many of recent introduction.

SMALL FRUITS.

CURRANTS—Twenty-five choice sorts, including many new varieties
RASPBERRIES, GOOSEBERRIES, BLACKBERRIES and STRAWBERRIES of all new and approved varieties.

We have, for the accommodation of NURSERYMEN, STOCKS and SEEDLINGS, including APPLE, PEAR, PLUM, CHERRY, QUINCE, &c., &c. Also, SEEDLINGS OF EVERGREEN TREES including Norway Spruce, Balsam Fir, Scotch Pine, Austrian Pine, Larch and Hedge Plants.

ORNAMENTAL DEPARTMENT.

The stock of Ornamental Trees and Shrubs, both Deciduous and Evergreen, will be found to embrace all that is desirable among LAWN and STREET TREES and SHRUBS. ROSES, consisting of Hybrid Perpetual and Summer Roses; Moss, Bourbon, Noisette, Tea, Bengal or China and Climbing or Prairie Roses.

HARDY HERBACEOUS or BORDER PLANTS and BULBOUS FLOWER ROOTS, an extensive assortment.

All the above will be disposed of at low rates, and on advantageous terms. For further details we refer to our full set of Catalogues, which will be mailed to applicants who inclose a one cent stamp, for each.

No. 1. Descriptive Catalogue of Fruits, &c.
No. 2. do do Ornamental Trees, Shrubs, Roses, &c.
No. 3. do do Green-House and Bedding Plants, Dahlias, &c.
No. 4. Wholesale or Trade List for Nurserymen and Dealers.
No. 5. Catalogue of Bulbous flower roots.

☞ All communications to be addressed to

A. FROST & CO.,
Genesee Valley Nurseries,
Sept. 1858. Rochester, N. Y.

ANDRE LEROY'S NURSERIES AT ANGERS, FRANCE.

The proprietor of these Nurseries—the most extensive in Europe—has the honor to inform his numerous friends and the public that his Catalogue of fruit and ornamental trees, shrubs, roses, seedlings, fruit stocks, &c., for the present season, is now ready and at their disposition.

The experience which he has acquired in the last ten years by numerous and important invoices to the U. S., and the special cultures which he has established for that market upon an area of over 300 acres are for his customers a sure guarantee of the proper and faithful execution of their orders.

Apply as heretofore to F. A. Bruguiere, 138 Pearl-St., New-York, his sole Agent in the U. S.

NOTE.—All advertisements or circulars bearing the name of Leroy Angers must not be considered as emanating from our house if they do not at the same time mention that Mr. F. A. Bruguiere is our Agent.

Address
F. A. BRUGUIERE, New-York.
ANDRE LEROY, Angers, France.

To the Tree Trade.

100,000 PLUM TREES.

The attention of the Trade is particularly requested to our Plum Trees, of which we offer the present Autumn 100,000 Trees from one to four years old, grown on a vigorous and hardy Plum stock, of which we have the monopoly. These trees are from four to eight feet in hight, stocky, and perfect pictures of healthful condition.—The varieties are such, as our experience as Plum orchardists, has demonstrated to be eminently worthy of perpetuity.

	doz.	hun.	thous.
PLUMS—50,000 4 to 6 feet in hight, one year old	$3.50	25 00	225.00
PLUMS—10,000 3 to 4 feet in hight, one year old	3.00	20.00	180.00
PLUMS—38,000 4 to 6 feet in hight, two years old	4.50	30.00	250.00
PLUMS—10,000 6 to 8 feet in hight, four years old	6.00	45.00	400.00

C. REAGLES & SON,
UNION NURSERIES.
Schenectady, N. Y.

NURSERY TREES AND STOCKS, Seneca Lake Highland Nurseries, Havana, Schuyler Co., N. Y., having been established 17 years, can furnish a most valuable stock, at low rates, to any planting orchards, fruit yards or pleasure grounds, wishing stock to retail or plant in Nurseries, also seeds of the Pear and Apple, and Pits of the Peach, Plum and Cherry. Trees of the genuine "TOMPKINS CO. KING" Apple, the fruit of which sells in New-York, at $6 to $8 per barrel, can be furnished. Price and descriptive Catalogues furnished gratis on application by mail.

E. C. FROST.

Catch The Tree Insects.

A NEW, SIMPLE and EFFECTIVE apparatus for catching all kinds of INSECTS, Canker Worms, Measure Worms, Aphides, &c., &c., has just been invented by Capt. Wm. W. Taylor, of South Dartmouth, Mass. The immediate home demand is now exhausting all that can be made, but arrangements will soon be completed to manufacture them fast enough to meet the wants of a wider demand. For further particulars address

WM. W. TAYLOR,
South Dartmouth, Mass.

Ornamental Trees, &c.

ELLWANGER & BARRY invite the attention of Nurserymen and Dealers and also gentlemen improving their grounds, Landscape gardeners, &c., to their great stock of Ornamental Trees, Shrubs and Plants, covering upwards of *Ninety Acres*, closely planted, all well grown and in the most perfect health and vigor.

DECIDUOUS TREES—Elms, Maples, Cypress, Catalpas, Horse Chestnuts, Larch, Laburnums, Lindens, Magnolias, Mountain Ash, Tulip Trees, Salisburia, Poplars, Thorns, &c., &c., of all sizes.

WEEPING TREES—Ash, Birch, Elm, Linden, Mountain Ash, Poplar, Thorn, Willow, including the American and Kilmarnock.

EVERGREEN TREES—Arbor Vitæ, (American, Siberian and Chinese.) Red Cedar, Common Juniper, Balsam Fir, European Silver Fir, Norway Spruce, Red American Spruce, African or Silver Cedar, Japan Cedar (Cryptomeria.) Pines (Austrian, Scotch, Benthomiana, &c.,) Yew (English and Irish.) Tree Box, Mahonia, Washington, or "Big Tree" of California, and many other California Evergreens.

FLOWERING SHRUBS, including all the finest new varieties of Althea, Calycanthus, Flowering Currant, Deutzia, Loniceras, Lilacs, Spiræa, Syringas, Viburnums, Wiegelas, &c., &c.

CLIMBING SHRUBS, such as Honeysuckles, Bignonias, Aristolochia, (Pine vine,) Clematis, Ivy, &c.

ROSES, Pæonies, Dahlias, Phloxes, and other hardy border perennial plants.

Parties interested are invited to examine the stock. To those who buy largely, prices will be made entirely satisfactory as the stock is very great and must be reduced.

The following Catalogues sent gratis, pre-paid, to all who inclose one stamp for each, viz.:

No. 1—Descriptive Catalogue of Fruits.

No. 2—Descriptive Catalogue of Ornamental Trees & Shrubs, &c.

No. 3—Descriptive Catalogue of Dahlias, Greenhouse Plants, &c.

No. 4—Wholesale Catalogue.

☞ See advertisement of Fruit Trees, Stocks, Bulbs, &c.

ELLWANGER & BARRY,
Mount Hope Nurseries, Rochester, N. Y.

Bulbous Flower Roots.

ELLWANGER & BARRY offer a large stock of the finest Dutch Bulbs, including Hyacinths, Tulips, Crocus, Lilies, Jonquils, &c., at the lowest rates.

Orders promptly filled after 1st Sept. Priced Catalogues sent gratis.

See other advertisements.

MOUNT HOPE NURSERIES, Rochester, N. Y.

RUSSIA OR BASS MATS, selected expressly for budding and tying. GUNNY BAGS, TWINES, &c., suitable for Nursery purposes, for sale in lots to suit by D. W. MANWARING, Importer,
248 Front-street, New-York.

Rebecca Grape Vines for Sale

AT REDUCED PRICES.

2 years old vines, strong plants $20 per dozen, $150 per 100.
1 year old vines, good plants $12 per dozen, $80 per 100.
Diana, two year old vines, strong plants $3.00 per dozen.
1 year old vines, good plants, $3.00 "
Concord, 2 year old vines, strong plants, $6.00 "
1 year old vines, good plants, $6.00 "
Delaware, 1 year old vines, good plants, $3.00 each.
Isabella, 2 year old vines, strong plants, $18.00 per 100.
1 year old vines, good plants, $10.00 per 100.
Catawba, 2 year old vines, strong plants, $15.00 per 100.

STRAWBERRIES

of the most approved varieties, including Prince's Imperial Scarlet, Primate, Magnate the largest of all, price $2.00 per hundred, $10 per thousand,

LINNÆUS RHUBARB,

per dozen, $2.00; per hundred, $10.

Also a general assortment of Fruit Trees, Evergreens, &c. I beg leave to call the attention of those wishing to purchase Rebecca Vines, as I have the largest stock and strongest vines of any one.

☞ Terms positively Cash.

WILLIAM BROCKSBANK,
Prospect Hill Nursery, Hudson, Columbia Co., N. Y.

True Delaware Grape Vines.

From the original stock; also LOGAN, REBECCA, and DIANA VINES, strong, hardy plants, from the open ground, ready for delivery this Fall. GEO. W. CAMPBELL,
Sept. 1, 1858. Delaware, Ohio.

LINNÆUS RHUBARB
ORANGE RASPBERRY,
LAWTON BLACKBERRY.

Fine plants of the above best varieties for sale in quantity for field planting, &c., at low rates. Address
FREEMAN & KENDALL, Ravenswood Fruit Garden,
Ravenswood, L. I., near New-York.

WILSON'S ALBANY SEEDLING!

THE BEST AND MOST PROLIFIC STRAWBERRY!!

Yields 200 Bushels per Acre!!!

UNEQUALED for SIZE, COLOR, FLAVOR, FIRMNESS, FRUITFULNESS, and LONG CONTINUED RIPENING—is perfectly hardy. Can be transplanted safely during the whole of September and October at the North, and until end of November at the South. Circulars, with description of fruit, &c., sent to all applicants including stamps. Price, packed and delivered in Albany, $10 per thousand, $1 50 per hundred, or $1 for fifty. Orders, with cash, promptly attended to. By
WM. RICHARDSON, 96 South Pearl St.
Albany, N. Y.

Strawberries.

ELLWANGER & BARRY are prepared to furnish all the best American and Foreign varieties, new and old, strong, well-rooted plants, at the lowest rates. All orders, whether for one dozen or 10,000 plants, promptly filled after 15th Aug., packed so as to go by Express safely to the most distant parts of the country.

Catalogues sent gratis.

MOUNT HOPE NURSERIES, Rochester, N. Y.

Peabody's Strawberries.

GENUINE PLANTS for sale, (after Sept. 20.) Delivered in New-York City, carefully packed, at $1 50 per dozen, or $10 per hundred. Address
ROBERT CUNNINGTON, 191 Water-st., New-York.

PEABODY'S STAWBERRY for sale at $2 per dozen, or $10 per hundred.
WILLIAM LAWTON,
New-Rochelle, N. Y.

The Great Strawberry.

Felten's Improved Albany Seedling Strawberry,

grown by A. L. FELTEN, of Philadelphia, is now offered for the first time to the public with the assurance, that in all the points which constitute a really desirable first class fruit, (whether for market or private use) it stands without a rival. It is not only of extraordinary size, but it is far more prolific than any other known variety. The yield has been satisfactorily proven to be fully double that of the most esteemed kinds. Its color is a deep, rich, glossy red; while in point of flavor, it is not excelled. THE FELTEN SEEDLING is remarkably solid and firm fleshed—which adapts it admirably for carrying to market, preserving, &c. Being a hermaphrodite, and a remarkably early and late bearer, it may justly be regarded as the most desirable strawberry in the market. Combining as it does the great essentials of extraordinary size, great productiveness, fine color and flavor, unusual firmness of flesh, and late and early bearing, it is offered to the public with the confident belief that it is destined to supersede all others.

Price of Plants, $3 per dozen, or $15 per hundred, securely packed, and delivered at any city Express or Depot, free of charge. A handsome illustration of the fruit, natural size, drawn from the growing plant, furnished on post-paid application.

As the supply of plants is limited, early orders are necessary to secure them. As the entire stock of plants are now in our possession, purchasers are cautioned against all attempts to supply them except through our house.

SPANGLER & GRAHAM,
No. 627 Market st. Philadelphia.

NEW-ROCHELLE (OR LAWTON)

BLACKBERRY PLANTS.

PRICES REDUCED!

The Subscribers announce to their friends and customers that they have now

OVER SIX ACRES
of the
GENUINE NEW-ROCHELLE (OR LAWTON)
BLACKBERRY PLANTS

under cultivation, and in good condition.

They are therefore prepared to fill large orders the coming FALL and the next SPRING, at the following reduced prices:

One Thousand Blackberry Plants	$80
Five Hundred Plants	41
One Hundred Plants	10
Fifty Plants	6
Two Dozen Plants	3
One Dozen Plants	2

N. B.—All Plants ordered of us will be TAKEN up and PACKED with the GREATEST CARE, and UNDER OUR OWN PERSONAL SUPERVISION.

Of the MANY THOUSANDS sent out by us last year, we have heard very few instances of failure, notwithstanding that they have been forwarded to

EVERY PART OF THE COUNTRY,

and the setting out has often been entrusted to unskillful hands.

Printed directions for setting and cultivating are sent with every package.

GEORGE SEYMOUR & CO.,
South Norwalk, Conn.

The Lawton Blackberry

Is unique, and not, as some have been led to believe, the common "NEW ROCHELLE BLACKBERRY," *improved by cultivation*. It differs in shape, size, and quality from all others. Is perfectly hardy, enduring the severest Winters without protection. The fruit is delicious, having small seeds in proportion to its size; in a prodigious bearer, and in any *good farming soil*, the stalk, leaf, flower and fruit, will grow of mammoth proportions.

This variety only is cultivated by the undersigned for sale, and for the convenience of Clubs, and those who take orders for plants. They will be safely packed in boxes, put up in clusters of one dozen, without charge for package, at the following rates: A box of 1 dozen, $2; a box of 3 dozen, $5; a box of 8 dozen, $10. To prevent imposition, *every package should be marked and branded*, and those who purchase will thus secure the genuine variety, without admixture, and may enjoy this delicious fruit the second Summer in perfection. The money should accompany the order, with name and address distinctly written. N. B.—*No itinerant plant sellers or traveling agents are employed to sell the plants from my grounds.* Address
WILLIAM LAWTON, No. 54 Wall-st., New-York.
Or New Rochelle, N. Y.

Orange's Crystal White Blackberry

Is offered for the first time to the public; its color is clear Crystal White, it is very prolific while the fruit is larger than the Lawton and of superior flavor, rendering it the most desirable Blackberry ever offered to the public. Price of plants, $5 per dozen securely packed and delivered at the Express Office free of charge. As this plant is quite new, the supply is very limited; early orders are necessary to secure them.
Address JOHN B. ORANGE,
Albion, Illinois.

NEWMAN'S THORNLESS BLACKBERRY is planted and cultivated like the Antwerp Raspberry, and will yield more marketable fruit per acre than any other cultivated Blackberry. It is a sweet, fine-flavored, large sized berry, and the plants are as free from thorns as the common black raspberry. Send for a circular. A. A. BENSEL,
Milton, Ulster Co., N. Y.

True H. R. Antwerp Raspberry plants in quantities.

PEARS! PEARS!!

FIELD'S PEAR CULTURE, Now Ready!

A COMPLETE MANUAL for the cultivation of the
PEAR TREE.

The causes of failure pointed out, and the successful method given.

THREE HUNDRED PAGES, AND ONE HUNDRED AND FIFTEEN ENGRAVINGS.

PRICE 75 CENTS, sent by mail postage paid on receipt of price.

A Catalogue of more than one hundred Agricultural Books sent to all applicants.

A. O. MOORE,
Agricultural Book Publisher, 140 Fulton st.,
New-York.

Raspberries, Grape Vines, Rhubarb, &c.

A choice assortment of small fruits, including

Brinkle's Orange Raspberry,

a new variety unequaled in flavor and beauty, also very productive and considered by many as the very best, also Thunderer —and Vice Pres. French—and

Myatt's Linnæus Rhubarb,

an English sort particularly tender, fine flavored and productive, and recommended as the most profitable for marketing, and

Rebecca & Delaware Grape Vines,

strong and well rooted, also

BLACKBERRIES—New Rochelle or Lawton, and Newman's Thornless.

CHERRY CURRANTS.

STRAWBERRIES—Hovey's Seedling, Boston Pine, Large Early Scarlet.

PEABODY'S NEW SEEDLING.

DWARF PEAR TREES—of the most approved varieties.

The above plants are offered to the Trade, Market Gardeners and others, wholesale and retail. Catalogues furnished on application. FREEMAN & KENDALL,
Ravenswood Fruit Garden, Ravenswood, L. I., near N. Y.

Twelve Diplomas.

Full directions for preserving accompany the cans.

PRICES.

Quart Cans, per dozen	$2 50
Three Pint Cans, per dozen	3 00
Half Gallon Cans, per dozen	3 75
Half Gallon Cans, (Extra Large Openings,) per dozen	4 25
One Gallon Cans, (Extra Large Openings,) per dozen	5 00
Wrenches, each	6
Funnels, each	10

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FOR PRESERVING MEATS, FRUITS, VEGETABLES, the products of the Farm and Dairy, and all perishable articles, WITHOUT DAMAGE from heat and moisture in SUMMER, OR COLD IN WINTER.

Invaluable for Farmers, Grocers, Butchers, Candle and Oil Makers, Hotels, Restaurant Keepers, AND IS THE BEST DAIRY OR MILK HOUSE IN THE WORLD.

Milk can be kept sweet for weeks in Summer, and Butter made with equal facility the entire season.

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For rights, plans, or estimates, apply to the undersigned. H. C. Getty, at John Gebney's, West Street, New-York, is acting in the City of New-York.

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These cans are so simple in their construction that any one can close fifty cans an hour without the aid of a Tinner. They require neither Solder, Cement, nor Wax.

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THERMOMETERS, BAROMETERS, &c., of reliable quality and various descriptions, among which are those particularly suited for Horticultural purposes, which register the coldest and warmest degree of temperature during the 24 hours, in the absence of the observer. For sale by D. EGGERT & SON, 239 Pearl st.

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A large assortment of Grass and Clover, also Field and Garden Seeds.

PEABODY'S STRAWBERRIES, which I can furnish after the 15th of September. For sale by R. L. ALLEN,
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I have several fine young Short Horns, male and female for sale, also my Stock bull Hiawatha, 1663.
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" R. H. Haydock, Cashier Market Bank, New-York.

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We have numerous letters from those who have seen and used these presses during the past season, similar to the following from Wm. Thompson, Esq., South Londondary, Vt., who writes Feb. 8, 1858, as follows:

GENTS: "I think your press, with the improvement you have made recently, will exceed anything of the kind yet got up, for it will press more in a day, with only two hands to work it, and do it easier, than any other press in New-England."

No. 1 Press—Weight of Bale 150 to 200 pounds.
No. 2 Press— " " 250 to 300 "

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A new and Profitable use for Swamp growth and the trimmings of Trees.

DANIEL'S PATENT "GRANULAR FUEL" is the growth of swamp lands cut into lengths adapted for kindling purposes or Summer fuel (about four inches). This article is preferred to charcoal or split wood for kindling coal fires, no shavings being required. An inexhaustible supply of material can be found within convenient distance of all our cities and towns. It repeats its growth every three years. With Daniel's Patent Fuel Cutter and one horse power one man can cut 600 bushels per day. Seasoned hickory three inches in diameter is cut with it. Upward of 40 machines are now in successful operation in Massachusetts. GRANULAR FUEL BRINGS THE SAME PRICE AS CHARCOAL, AND COSTS BUT THREE CENTS A BUSHEL. A right with machine, costing $500, insures an income of $1,500 per annum. Send for Circulars containing references, &c., to
B. D. WASHBURN, Taunton, Mass.
General Agent for United States.

FAIRHAVEN, Mass., June 7th, 1858.

Mr. B. D. WASHBURN:

Dear Sir—I improve a moment to fulfill my promise relative to my "Granular Fuel Business"—the right of which I purchased of you—and I am happy to say that it far exceeds my most sanguine expectations. We did not commence taking it into the market until this Spring, and I now find it difficult to supply the demand. So you know I am not doing *a very bad business*, as you are acquainted with the profits under such circumstances; and was it not that my health is poor, I would establish the business in some other localities, providing I could obtain the right. I thought that $500,00 was a great price to pay for New-Bedford and Fairhaven, but I would not dispose of it now for $2000,00, and from what I can learn, all that are in the business are doing a very good business. It is a cash business, which makes it a very agreeable employment. Please accept my most hearty thanks for your very good advice.
Respectfully yours,
ISAIAH WEST.

☞ The following is from a gentleman who has used heretofore the split wood, but residing in Taunton the past Winter used the Granular Fuel. He is now residing in Brooklyn:

NEW YORK, May, 18, 1858.

Mr. B D. WASHBURN, Taunton, Mass.:

Your favor asking my opinion of the Granular Fuel is at hand, and would say that my family used no other kind of kindling material the past Winter, for they found it not only cheaper than split wood, but far more convenient in kindling, as no papers or shavings are necessary—and it takes no time to arrange it for lighting, simply throw it in and apply the match.

As soon as it is for sale in Brooklyn shall dispense with the split wood. Respectfully, &c.
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141 Broadway, N. Y.

EXCELSIOR FAN MILL

Will clean 60 Bushels of Grain per hour.

COMBINED POTATO DIGGER AND DOUBLE MOLD BOARD PLOW, will turn out from 10 to 15 acres per day.

HORSE POWERS AND THRESHING MACHINES, the best and easiest working powers in use.

CLOVER HULLERS with SEPARATORS.
SAW MILL AND SAW DOG POWERS.
CIDER MILLS AND PRESSES. HAY PRESSES.
CORN SHELLERS, HAY AND STALK CUTTERS, &C.

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GRIFFING, BROTHER & CO.
60 Cortlandt Street,
New-York City.

"THE WONDERFUL PUMP."—This pump works by hand in all depths to 150 feet! Warranted. Prices from $16 to $60. Address
JAMES M. EDNEY, 147 Chambers-st., N. Y.

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of all kinds, for sale by J. B. RYAN, Importer of Hardware, 114 Yonge-st., Toronto, Canada West.
Manufacturers of above goods will send their lists.

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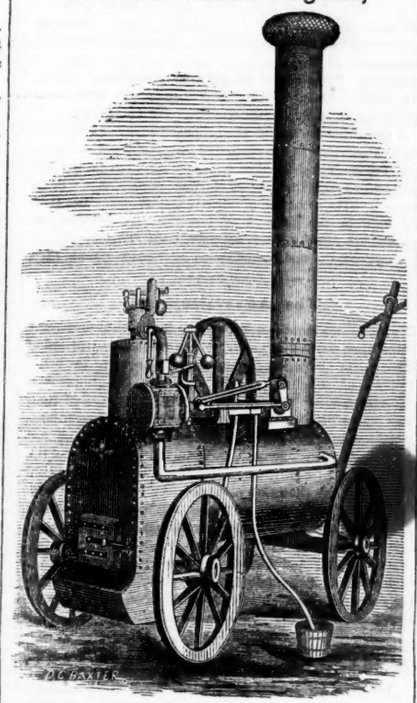
GENERAL COPPER-SMITH WORK.

Distilleries of all kinds, for making brandy and alcohol from Chinese Syrup. Steam and horse cane mills, syrup pans, skimmers, dippers, syrup guages and pumps, brewing apparatus, by steam or fire JOHN W. REID, 11 Old-slip.

Portable Steam Engines,



Built upon an improved plan, adapted to plantation work, Driving Threshers, Saw Mills, Pumps and agricultural purposes generally.

They are economical on fuel, very compact, and strong, easily managed, and readily moved from place to place. We build from 4 to 40 horse-power.

For prices and further information, address
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SAWINGS, TURNINGS AND CRUSHED BONES FOR Sale by the Manufacturers in large or small quantities.
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Westchester Co., N. Y.

To Practical Farmers and Dealers in Fertilizers.

The ***NATIONAL FERTILIZER***, a modern compost, is prepared under the direct superintendence of L. HARPER, LL.D., formerly Professor of Analytical Chemistry and Agriculture in the State University of Mississippi, as also State Geologist. Its ***basis*** is the GREEN SAND MARL OF NEW-JERSEY, which is chemically combined with ***fish and pure animal bone.*** Letters Patent for this and foreign countries have been granted. It is unhesitatingly accredited ***superior*** to Peruvian Guano, strengthening the soil, and beyond the possibility of exhausting land where applied. ***The increase in the yield of plants and all cereals is largely augmented;*** while it supplies a ***continuous*** source of fertility. ***For sandy, barren and abandoned lands, and where other manures*** have failed, we ask but ***one trial,*** trusting ***solely*** upon the ***rare*** constituents which this Fertilizer abundantly possesses, and which are ***so wholly and peculiarly essential*** in an article of Fertility, such as is here ***reliably*** represented. We would beg the attention of Farmers to its use the coming Autumn for Winter grain, and to the fact that it has arrested ***the rot*** in potatoes ***after*** decay has commenced. Price per ton of 2000 lbs., $35. For all detailed particulars, analyses, directions and recommendations, apply or send to the office of ***The National Fertilizing Co., 37 Fulton-Street.***

JOS. C. CANNING, Agent, New-York.

We would distinctly give notice (as abortive imitations and attempted infringements upon our Patent have already been made) that we have ***no connection whatever*** with other Fertilizing Companies of ***any character or name.***

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Grapery & Green-House Builder,
YONKERS, N. Y.

Frames and Sashes for Hot-Houses. Green and Hot-Houses and Conservatories erected, and warranted.

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This is the only stitch that can not be ravelled and that presents the same appearance upon each side of the seam. It is made with two threads, one upon each side of the fabric, and interlocked in the center of it.

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FOSTER & SARGENTS. The best Parer.
WHITTEMORE & BROTHERS Parer, Corer and Slicer.
PRATT'S Automaton Slicer, for drying fruit. These improvements are for sale to the trade at lowest cash prices.
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"METROPOLITAN WASHING MACHINE."

This is a perfect Washing Machine. It saves more than one half the time, labor, and expense of washing, breaks no buttons, and does not wear the clothes. It keeps the clothes constantly turning so that all parts are equally and thoroughly washed.

It is guaranteed to do all this if the directions, which are simple, are followed.

Price $16. Orders promptly filled. Full directions accompany the Machine

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DAVID LYMAN, Middlefield, Conn.

Patent Alarm Whistles and Speaking Pipes Manufactured and for Sale by

W. OSTRANDER,
Sole Patentee and Maker
No. 57 Ann-St., N. Y. City.

The PATENT WHISTLE is acknowledged by every one to be the best arrangement for Speaking Pipe Alarms in use. It is far superior to the Bell, and less liable to get out of order. The Pipe is made by a Patent Machine and is a superior article, and Warranted in every particular.

Sold by all the principal Hardware Stores in the States.

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The bruised and unwholesome state, and consequent unsaleableness of tender fruits from want of sufficient care in their transportation is well known.

The Protector is designed for the safe conveyance of peaches, plums, strawberries, blackberries, eggs, or anything that requires more than ordinary care. Specimens may be seen at
R. L. ALLEN'S, No. 191 Water-st., New-York.

Orders for Protectors of larger size than the specimens will be executed, but the heavier the package the more rigid must be the springs. Orders left with R. L. ALLEN, as above will be promptly executed. HENRY B. OSGOOD, Inventor and Manufacturer. Whitinsville, Worcester Co., Mass.

Potato Digger.

This is a new and highly improved Implement, got up by myself, *after long experience of working it in the field.* It is by far the best thing of the kind in use. One man and a pair of horses will dig faster than twenty men can pick up. It throws all the potatoes, (even the smallest), clean out of the ground, and leaves them clear of dirt on the surface. R. L. ALLEN,
191 Water-st., New-York.

PITKINS' Potato Diggers—Keystone Cider Mills—Horse Powers, &c. For sale at Agricultural Depot, 100 Murray-st., N. Y. HENRY DIBBLEE

See Here! See Here!

We have been in the habit of offering annually, to *new subscribers* for any year, what we have termed the **Baker's Dozen**; that is, the *last* two numbers of the preceding year, making 14 instead of 12 copies. This has involved some confusion, considerable correspondence, and the printing of several extra editions. For these and other reasons, we have concluded to vary the practice. We propose, however, to make an offer still better for those who accept it in time. Our main dependence for an increase in circulation is upon the kind influence of those subscribers who are already acquainted with this journal, and it is, of course, for our interest to form the acquaintance of as many new persons as possible *before* the beginning of a new volume (in January.) To accomplish this end, we make the following

PROPOSITION.

Every *new subscriber*, sending in one dollar for Volume Eighteen (1859), will receive *without charge* such numbers of *this* volume as are published after the date of his or her subscription. Thus:

I. *New Subscribers* for 1859 (Vol. XVIII), sending in their names and subscriptions *before* October 1st, will receive three valuable numbers (October, November and December) without charge.

II. *New Subscribers* for 1859, who send their subscriptions *after* October 1st and *before* November 1st, will receive the November and December numbers without charge.

III *New Subscribers* for 1859, who send in their subscriptions *after* November 1st and *before* December 20th, will receive the December number free.

In accordance with this proposal, the names of all *new* subscribers received after this date, (Sept. 1st,) will be entered at once on our mail books to the close of 1859, and they will thenceforth receive their papers regularly with old subscribers on the first of each month.

We shall adhere strictly to the above terms respecting extra numbers, except in the case of new subscribers on the Pacific coast, and at other remote points where there is no opportunity to respond at once to this invitation. Enough extra copies of the ensuing three numbers will be printed to supply premium copies to such as are prevented from applying for them in season on account of their distant location.

The offers thus made, apply to both the English and German editions.

A FAVOR ASKED. Will all our present readers, who have tried and approved the *Agriculturist*, do us the favor to mention the above proposition to their friends and neighbors? After telling them what the *Agricuturist* has been and *is*, you may on our part promise that the next volume will *not* be like the present one, *but even still further greatly improved*. We are confident it will be such a volume as has never yet been issued, in point of comprehensive, plain, practical information of great value to every family in the country. Please give us your aid, one and all, and let us save a large proportion of the expense of advertising, and invest it in valuable improvements in the paper itself. We have, so far, expended every dollar received, upon the paper itself, and yet our ambition is by no means satisfied. Give us the wherewithal, and we will return you such a paper as you have not yet dreamed of.

Seed Reports wanted.

During the present year we have distributed among our subscribers not far from 140,000 parcels of seed, including seventy-one varieties. The season has badly interfered with experiments upon these in many instances, often preventing their germination. That all the seeds were in good order we were sure of beforehand, and have since proved, as we now have growing all of the seventy-one varieties, our parcels being taking at random from among those distributed to subscribers. As before noted, however, some varieties required a second planting, owing to their being literally drowned out.

Next winter we purpose to make a still more liberal distribution of seeds, a catalogue of which will be given before the close of this year. *All* subscribers will share alike in this distribution, the seeds being supplied *without charge* in all cases, our design being to disseminate as widely as possible in the country the germs of valuable Field and Kitchen and Flower garden productions.

In making out our next list, we shall be in part guided by the results of this year. Some less valuable kinds will be dropped from this year's catalogue, and a number of new ones added.

We now would request our readers as they have occasion to write to us, to inclose *brief* notes upon the particular kinds they have tried this year. Please make the notes upon each kind, on a *separate* slip of paper, giving the number, if possible, (if not, give the name,) then add your name and location, and next brief notes of the result. In this way we can conveniently file the remarks on each variety by themselves, and make up a summary of the results. Much valuable information will thus be gathered for future use in these columns.

Convention of Agricultural Editors.

It is to be hoped that so far as at all practicable, the Editors of Agricultural and Horticultural Journals, throughout the country, will make their arrangements to be present at the *opening* of the Annual Meeting of the American Pomological Society, in New-York city, on Tuesday, September 13th. The society will convene at 10 o'clock A.M. at Mozart Hall, No. 663 Broadway.

A room for the use of the proposed editorial gathering will be provided in the same building, and the members of the Press duly notified of a convenient hour for the first assembling, after which all further proceedings will be subject to the direction of those in attendance. We trust this will be the germ of an important Association, one productive of great good, not only to the fraternity, but to the agricultural and horticultural interests of our country.

The Advertisements

Crowd us this month, and we have had to shut down the gates upon the last comers. We are almost surprised at this rush of business notices, as we use none of the usual methods of, soliciting agents, circulars, etc., to draw in advertisements. We suppose business men are of their own accord finding out that the *Agriculturist* circulates mainly among intelligent, enterprising readers, and that it is one of the cheapest mediums in the country—the present cost of advertising being much less than one cent a line for each thousand readers. We have refused hundreds of dollars' worth of patent medicine, and humbug advertisements, though offered very high prices for their insertion, and we congratulate our readers upon the fact that they will find our advertisers generally a class of high-minded, honorable business men. These business pages, taken as a whole, will be valuable for reference.

American Agriculturist.

(ISSUED IN BOTH ENGLISH AND GERMAN.)

A THOROUGH-GOING, RELIABLE, and PRACTICAL Journal, devoted to the different departments of SOIL CULTURE—such as growing FIELD CROPS; ORCHARD and GARDEN FRUITS; GARDEN VEGETABLES and FLOWERS; TREES, PLANTS, and FLOWERS for the LAWN or YARD; IN-DOOR and OUT DOOR work around the DWELLING; care of DOMESTIC ANIMALS &c. &c.

☞ The matter of each number will be prepared mainly with reference to the month of issue and the paper will be promptly and regularly mailed at least one day before the beginning of the month.

A full CALENDAR OF OPERATIONS for the season is given every month.

Over SIX HUNDRED PLAIN, PRACTICAL, instructive articles will be given every year.

The Editors and Contributors are all PRACTICAL, WORKING MEN.

The teachings of the AGRICULTURIST *are confined to no State or Territory, but are adapted to the wants of all sections of the country—it is, as its name indicates, truly* AMERICAN IN ITS CHARACTER.

The German edition is of the same size and price as the English, and contains all of its reading matter, and its numerous illustrative engravings.

TERMS—INVARIABLY IN ADVANCE.

One copy one year.....$1 00
Six copies one year.....5 00
Ten or more copies one year....80 cents each.

An extra copy to the person sending 15 or more names, at 80 cents each.

☞ In addition to the above rates: Postage to Canada 6 cents, to England and France 24 cents, to Germany 24 cents, and to Russia 72 cents *per annum*.

Delivery in New-York city and Brooklyn, 12 cents a year.

Postage anywhere in the United States and Territories must be paid by the subscriber, and is *only six cents a year*, if paid in advance at the office where received.

Subscriptions can begin Jan. 1st., July 1st., or at any other dates if specially desired.

The paper is considered *paid* for whenever it is sent, and will be promptly discontinued when the time for which it is ordered expires.

All business and other communications should be addressed to the Editor and Proprietor,

ORANGE JUDD,
No. 189 Water st, New-York.

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Bowling-Green	Bentleyville	Sept.	8—9
Florence	Florence	"	16—17
Armstrong	Kittaning	"	21—24
Washington	Washington	"	23—24
Berks	Reading	" 29	Oct. 2
Union	Burgettstown	Oct.	5—6
Montgomery	Springtown	"	5—7
Lancaster		"	5—8
Northumberland	Milton	"	6—8
Monongahela	Monongahela	"	7—8

WISCONSIN.

Lafayette	Darlington	Sept.	21—22
Grant	Lancaster	"	22—23
Waushura	Wautoma	"	22—23
Rock	Janesville	"	28—30
Walworth	Elkhorn	Sept. 29	Oct. 1
Portage	Portage	"	15—16

IOWA.

Sioux	Sioux City	Oct.	—4
Washington	Washington	"	6—8

TENNESSEE.

Marshall	Lewisburg	Sept.	21—24
Giles	Pulaski	"	21—24
Middle District	Columbia	Sept. 27	Oct. 7
Smith	Rome	" 29	" 9